

BULLETIN OF RHODE ISLAND STATE COLLEGE

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REPORT **of the** **PRESIDENT and OTHER OFFICERS** **1946-47**



DECEMBER, 1947

KINGSTON, RHODE ISLAND

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November 28, 1947

My dear Governor Pastore:

On behalf of the Board of Trustees of State Colleges, I take pleasure in submitting herewith the Annual Report of the President and Other Officers of Rhode Island State College for the year July 1, 1946, to June 30, 1947.

Sincerely yours,

JOHN F. BROWN, Chairman

Board of Trustees of State Colleges

THE HONORABLE JOHN O. PASTORE
Governor of the State of Rhode Island
State House
Providence, Rhode Island

Report of the President

To the Board of Trustees of State Colleges:

IN making this report of the fifty-sixth year in the life of the college and my sixth year as president, I am happy to record that the college has made progress in the development of its educational services to the people of the state. In many ways it has been a significant year. The resumption of the normal routine of full academic work and of campus activities characteristic of prewar days has been highlighted with such new features as a record enrollment, the presence of war veterans in impressive numbers, hastily provided accommodations from war surplus, an enriched academic program, and a beginning upon our permanent building program. Unprecedented demands were laid upon us, which we met within the limits possible with our resources and in keeping with traditional standards.

Our undergraduate enrollment was 2215—1828 on the campus and 387 in the centers, an increase of 89 per cent compared with the year 1945-46. Our housing capacity was increased 85 per cent over the previous year; the floor area of our buildings 32 per cent; in value our physical plant was increased 18 per cent; the number of employees of the college 20 per cent; the faculty and administrative staff, 40 per cent. To accommodate this growth in activity, the operating budget of the college was increased 32 per cent, of which the state appropriation for maintenance represented an increase of 24 per cent over the previous year.

The number of applicants for admission last fall exceeded 3200, and the actual number of freshmen registered in the first semester was 917—533 of whom were on the main campus and 384 at the centers. Of the total first semester students, 1563 were men, 652 women. Also, 1198 were veterans. In other words, about 54 per cent of the whole student body, and 76 per cent of the men, had been in the armed forces.

To absorb this increase during a period of reconversion and to fit it in with the economic and the social adjustments of the post-war period posed many administrative problems.

Yet while meeting routine demands from day to day, we have kept clearly before us the larger objectives of the college — strengthening our academic program; building up the faculty; establishing sound policies of student, faculty, and public relations; extending the services of the college, including research and adult education; perfecting plans for physical development, and securing the means for additions to the college plant.

Among the changes in student life we report the termination of the fraternity pool and the return of the fraternity houses to their respective organizations, also the development of a student life program centering in the improvised Union, with a full-time Director of Student Activities. The presence of married students on the campus, mainly veterans, has introduced a new element in the life of the institution. Our experience with the veterans as a group has been gratifying. In scholarship they have somewhat excelled the non-veterans. Also, we have found great satisfaction in the calibre of young people housed in the apartment hut area and at Fort Kearney.

The expansion of the college's services, with the multitude of adjustments involved in the transition from a wartime to a post-war program, would not have been possible without the able and enthusiastic cooperation of the faculty. To the faculty members individually and collectively I wish to express official thanks for loyal services and constructive endeavor. In teaching, in research, and in extension they have carried the burden of an enlarged program faithfully and well. Their work is an outstanding example of devotion to the best interests of our state.

DEVELOPMENT OF EDUCATIONAL PROGRAM

Since the end of the war, the college has given attention to developing its academic program and to adapting its offerings to the demands of the times. The School of Agriculture and Home Economics has been reorganized into two separate schools, and the work in the School of Home Economics has been set up in separate departments. Likewise, the School of Business Administration has been departmentalized. A Division of Nursing has been established. Work in forestry

and in agricultural engineering has been introduced into the School of Agriculture.

The School of Engineering and the School of Business Administration are cooperating in offering a new curriculum in industrial engineering.

Traditionally, our technical curricula have included a substantial share of courses in the humanities. In recent years the college has kept pace with the trend toward liberal education by offering a curriculum in liberal studies in the School of Science. Since the war the demand among students, parents, and alumni for a full liberal arts program has grown increasingly urgent. That eventually we shall have a program of liberal arts seems inevitable if we are to keep in step with the progress of public higher education in other states. In fact, we have an obligation to do so if we are fully to discharge the mission of the college defined in the "charter" provision of the Morrill Land Grant Act of 1862, and reiterated in the act of the Rhode Island General Assembly of 1892. We look forward to the offering of a full liberal arts curriculum leading to the Bachelor of Arts degree in the near future.

Our course offerings are under constant scrutiny and are revised annually to meet changing requirements.

SUMMER SCHOOL

The emphasis upon cultural studies has been reflected also in our summer school, which in 1946 registered 750 students, and in the summer of 1947 almost an equal number. Many of them were our regular students, veterans and non-veterans, who enrolled to make up courses or to speed up the time of graduation. Special programs, notably the Music Camp and the Art Workshop, have attracted attention beyond the bounds of the state. Altogether, among those enrolled in the 1947 session of summer school were students who had studied in forty or more other colleges and universities; about fifty of them from Brown University. Our summer school is conducted on a fee basis and for the past two years has been self-supporting. We are gratified that, so far, we have been able to operate this important educational project without calling upon the state for a special subsidy.

RESEARCH

Until a few years ago, most of the research at Rhode Island State College was carried on by the Agricultural Experiment Station, which was financed entirely by federal funds. More recently, as the federal funds remained static and while demands for service and costs of operation increased, we have found it desirable to supplement the federal funds with modest allotments from our state budget. This has enabled us to develop such investigations as the study of the elm tree blight and the improvement of lawn grasses, for which federal funds are not available. In recent years also research grants from industrial firms in increasing volume have led to the outstanding discoveries which have attracted nationwide attention to Rhode Island. The extent to which the public has come to rely upon the Agricultural Experiment Station for technical advice was well illustrated when during the summer our scientists warned of the approach of blight upon potatoes and tomatoes and recommended certain spray treatments. These announcements in the press and over the radio brought a flood of inquiries which clogged our telephone service for days. This is a type of service the college is glad to render. I am happy to acknowledge the splendid cooperation of our press and radio friends in making such services available to the public.

For the complete story of the Agricultural Experiment Station during the past year, we refer you to its Annual Report published separately under the title, "Research for the Farmer." The results of the investigations of the past year have been highly gratifying; those conducted under industrial research grants have led to the discovery of processes which give promise of having large commercial value. Applications for patents have been made for some of these processes.

Our Engineering Experiment Station is younger than the Agricultural Experiment Station, but potentially it promises even greater benefits to Rhode Island industry. Because of its meagre budget, its more recent start, and its limited facilities, it cannot yet boast a very large program, but increasingly we may expect Rhode Island industries, particularly the smaller plants which are not in a position to maintain their own re-

search staffs, to look to our Experiment Station for assistance with their technical problems.

Likewise, our Bureau of Business and Economic Research potentially stands in a position to give valuable services to our business interests and our government departments and agencies.

Plans are under way for reconstituting the work of the Marine Biological Laboratory disrupted during the war. This branch of the college has unlimited possibilities of service from the point of view of both basic and applied science. Already it has contributed substantially to the state's resources, and with adequate support and proper direction it may become of large economic importance to the state.

In developing its program of research, the college is mindful of the need for keeping it in proper balance with resident teaching and with extension as well. It is possible, of course, to overemphasize one at the expense of the others. But with these three branches of service properly coordinated and integrated, they should supplement and strengthen each other rather than be in competition or conflict. For example, the teacher who is interested in research, who keeps abreast of progress in his special field, who gives some of his time to original investigation and creative scholarship should thereby be a better teacher. We would expect him to impart to his students some of his enthusiasm and the spirit of academic adventure. We would expect him to be better informed and more stimulating, and to command a higher degree of confidence and respect by reason of his research activities. Thus research becomes an effective tool in the teaching process.

Accordingly, as a means of strengthening the college's academic program while also serving the scientific, economic, and social interests of the state, we believe that the college, in planning for the future, should make adequate provision for the expansion of research in all its schools. There is good prospect that during the coming year the Federal Government will establish a national program of scientific research with the passage by the Congress of a National Science Foundation Act which will be acceptable to the President. It is urgently

hoped that the Act will insure freedom of research and democratic processes in its administration by providing for the distribution of a portion of the supporting funds on a geographical basis. Rhode Island State College expects to be ready to contribute its share to the program.

EXTENSION SERVICES

Besides more than two thousand full-time students, the college reaches thousands of others in all corners of the state through its Extension Service in Agriculture and Home Economics and its General Extension program designed particularly to serve those engaged in business and industry. The Extension Service in Agriculture and Home Economics is unique in that it is truly cooperative, since it is sponsored jointly by the United States Department of Agriculture, the State College, and the County Farm Bureaus, which receive support from the local town governments. It is, in fact, a partnership in educational endeavor by the federal, state, and local governments. A full report of this work is published separately.

A more recent service is that of the Division of General College Extension. Started during the war years, it has steadily grown in strength and in public confidence through rendering an important service in adult education. In a varied program of evening extension courses in business administration, insurance, engineering, home economics, industrial training, and workers' education, of institutes and of conferences, the General College Extension Division reports the impressive total of over 3500 individual enrollments during the past year. In addition, the Extension Division has served as the administrative agency for the off-campus centers.

Colleges and universities the country over have recognized that they have an important responsibility as well as an unparalleled opportunity in promoting sound relations between labor and management. We are aware that our democratic institutions are in grave danger unless a solution to our industrial problems is found. Much of the conflict between organized labor and management springs from a misunderstanding of the basic economic principles and from an inability to deal with the human element in business relations. Any con-

tribution a college can make toward industrial peace is an aid to the preservation of America's traditional heritage. Rhode Island State College has been among the leaders of our colleges and universities in the field of workers' education, which has as its purpose the improvement of industrial relations. In this effort, the college has had the enthusiastic cooperation both of organized labor and of the state's industrial leaders. There are those who will testify that strikes in certain plants have been avoided because of these courses taken by groups of industrial workers. We only hope that our colleges are not too late in entering the field of labor relations.

CONFERENCES AND OTHER MEETINGS

In traditional fashion, the college during the past year was host to numerous state associations and conferences which met on the campus. The college is happy to share its facilities with the citizens of the state in this way. We regret that because requests have greatly multiplied in recent years, we are unable to accommodate all groups who wish to use the campus as a meeting place.

Following is a list of outside groups entertained on the campus during the past year:

July 31	Rhode Island Potato Growers Association
August 15	Rhode Island Fruit Growers Association
August 19-24	Textile Workers Union of America—CIO Officials
August 27-30	Symposium—Society for the Study of Development and Growth
September 4-6	Congregational Women's Conference
September 11	Fifteenth Annual Greenkeepers Field Day
September 17	Rhode Island Poultry Producers Association
October 10	Association of Governing Boards of State Colleges and Universities
October 18	Personnel Institute
October 23	Rhode Island Turkey Growers Association
November 3	Annual Meeting of Rhode Island State College Patrons Association
December 7	High School Model Congress
January 15	Meeting of Rhode Island Social Studies Association
April 17	Interscholastic Track Meet
	Spring Meeting of Rhode Island Home Economics Association
	Meeting of Barnard Club
April 19	Rhode Island Press Club
April 25-26	College Model Congress
May 7	Vocational Agriculture Conference
May 13	4-H Club Leaders Conference
May 28	Meeting of State School Superintendents
June 10	Meeting of Baptist Theological Center
June 11-13	Rhode Island Conference of Social Workers

June 12-13	Feed Dealers Conference
June 16-19	Rural Women's Camp
June 19	Meeting of Rhode Island Congress of Parents and Teachers
June 20-21	Rural Fire Control Conference
June 22-27	State 4-H Camp
June 27-28	Pasture Men's Conference
June 27	Meeting of New England Cemetery Association
June 27-28	Pasture Laboratory Meeting of group from U. S. Regional Pasture Laboratory, State College, Pa.

STUDENT ASSEMBLIES

Because the student body for the first time exceeded the capacity of Edwards Auditorium, it was not possible last year to hold weekly assemblies of the entire student body. Instead, assemblies were arranged alternately for different groups of classes. It is regretted that this was necessary, but there was no alternative. Assembly programs during the year included the following:

September 20	Convocation for formal opening of Fall Semester Speaker: President Carl R. Woodward Subject: "The College Meets the Post-War Challenge"
October 16	Honors Day Sponsored by Phi Kappa Phi
October 30	Wildlife Movies-Lecture Mr. Alan Cruickshank, National Audubon Society
November 13	Dr. F. W. Maroney, M.D.—Dean, Brooklyn College Subject: "Youth and Democracy"
November 27	Speaker: Father M. J. Ahern, Professor of Chemistry and Geology, Weston College Subject: "Design for Racial and Religious Understanding"
December 4	Speaker: Dr. Franklin Dunham—Chief of Radio, U. S. Office of Education Guest from Arts Program—Association of American Colleges
January 8	Sponsored by R. I. State College Interfaith Organization Speaker: James D. Glasse. Subject: "The World Student Service Fund"
January 22	Charles W. Havice, Professor of Sociology at Northeastern University Subject: "Sturdy Convictions on Strenuous Living"
March 12	10th Annual Rhode Island World Affairs Week Sponsored by International Relations Club Speaker: Robert Norton, World Affairs Analyst Subject: "Which Foreign Policy?"
March 26	Sponsored by the Jewish Chautauqua Society, Cincinnati, Ohio Speaker: Dr. Maxwell H. Goldberg, Professor of English, Massa- chusetts State College Subject: "The Prophets as Poets"
April 9	Cap and Gown Day Speaker: Father George B. Ford, Rector Corpus Christi Church, New York Subject: "Three Problems on the Home Front"
April 23	Speaker: Reverend Francis Thompson, Pastor Phillips Memorial Church, Cranston Subject: "All Americans All"

May 7	Speaker : Mr. Seumas MacManus Sponsored by "The Scroll" Subject: "Irish Poetry"
May 21	Speaker: Mrs. Bonaro Overstreet Subject: "How to Think About Yourself"

OFF-CAMPUS CENTERS

In 1946 after the college had admitted as many of the unprecedented flood of candidates as it could accommodate on the campus, hundreds of fully qualified applicants, both veterans and non-veterans, remained unprovided for. As the State College we had an obligation to these young people, particularly those from our own state, which we could not lightly ignore. A partial solution was found in the establishment of two off-campus centers, at Providence and at Bristol, where the freshman year's work was offered. Although undertaken with some misgivings, the experiment proved to be completely successful. Students from these two centers who satisfactorily passed their work were transferred to the main campus and were admitted to begin their sophomore year this fall.

Meanwhile, the number of candidates from the vicinity of Bristol for admission in the fall of 1947 was not sufficient to warrant the continuing of the center in this community. But the Providence center is being continued through the year 1947-48 at the Oliver Hazard Perry Junior High School with an enrollment of 364. It is a pleasure to acknowledge the co-operation and generous assistance given by the School Committees of Bristol and of Providence and by the officials of the Perry School and the Bristol High School. They have been more than generous in placing their facilities at the disposal of the college and in maintaining a cordial and friendly atmosphere while sharing with the college the use of their buildings. We are deeply indebted to them for this educational service.

VETERANS ADMINISTRATION

We have enjoyed excellent relations with the Veterans Administration, in both their federal and regional offices. Representatives of the Veterans Administration have been given office space on the campus for the counseling of student

veterans. A more equitable formula for reimbursement for the education of veterans, computed according to instructional costs, has been adopted as the basis for the contract. It is a pleasure to acknowledge the cooperation and the sympathetic understanding given the college by Colonel Davis G. Arnold, director of the Veterans Administration of Rhode Island, and his staff of associates.

ATHLETICS

In athletics the college has continued its high plane of performance, notably in basketball, in baseball, and in track. The New England Conference for Intercollegiate Athletics has been reconstituted to embrace the six land-grant institutions of the New England states. Henceforth it will be known as the Yankee Conference. We look forward to the development of leagues in the major sports in this Conference, and we believe that our athletic programs may properly focus upon contests with these natural rivals.

Incidentally, last fall we were fortunate to procure, as surplus property, the bleachers from Rogers Field at Camp Endicott. Twenty sections of these stands were transported to Meade Field and will enable us to provide more adequate accommodations for guests at football games.

Our athletic program has been ably aided by the alumni members of the Athletic Council. The three-year term of Mr. Robert Sherman, as alumni representative, was terminated in June. During his incumbency Mr. Sherman had a perfect record of attendance at Council meetings. The value of such service as he and his fellow members have given is difficult to appraise. His place has been taken by the election of Mr. A. C. Barton of the Class of 1922. Likewise, the vacancy caused by the resignation of Professor Stubbs as faculty representative has been filled by the appointment of Dean John F. Quinn.

ALUMNI RELATIONS

The college alumni number approximately 6000. As a whole, our alumni body is a relatively young group, since approximately three-fourths of the graduates are members of the classes of 1930 or later. As from year to year, the graduates

of the college have grown in number and maturity, they have gained in prestige and in influence, and have played an increasingly important role in the life of the State.

The program of alumni activity revived during the war has been constantly building up and paying dividends in advancing the interests of the college. The activities of alumni clubs have greatly increased. The Interfraternity Alumni Council has helped materially in reconstituting fraternity life on the campus. The progress of the Alumni Fund is gratifying. Particularly are we indebted to the alumni for the initiative they have taken in promoting the Memorial Union Fund.

Especially noteworthy is the service the alumni have given in interpreting the college — its purposes, its program, and its needs — to the public. Their enthusiastic support of the college demonstrated in numerous ways has been a source of strength and of encouragement which we gratefully acknowledge.

STAFF CHANGES

During the year the heads of two academic departments resigned from the faculty: Charles Fish, Professor of Zoology, to join the staff of the Oceanographic Institute at Woods Hole, and Frank W. Stubbs, Professor of Civil Engineering, to accept a position at Purdue University. Also, Mr. Norman Marble relinquished his position as Superintendent of Buildings and Grounds and accepted a similar position at the University of Texas Medical School at Galveston.

Professor Stubbs' position has been filled by the appointment of Professor Arthur A. Collard, who came to us from the faculty of Pratt Institute. On Mr. Marble's resignation, the supervision of the physical plant was reorganized and placed under the immediate direction of Mr. Edward Cayo, College Business Officer, assisted by Mr. Robert Kenyon as College Engineer.

Likewise, at the close of the school year, Dr. T. Stephen Crawford was appointed Dean of Engineering, Prof. George Ballentine Dean of the School of Business Administration, and Mr. J. B. M. Arthur, Jr., Director of the Division of General College Extension. All three of these men had acceptably filled

their respective positions in an acting capacity during the past year.

The growing volume of personnel work lately made it advisable to relieve Dr. Harold W. Browning of the duties of Dean of Men, as he had been serving also as Vice President of the college and Dean of the School of Science. Since the duties of the office required a person's full time, a separate office was set up and Dr. John F. Quinn was appointed to the position to begin his duties in September, 1947.

BOARD OF TRUSTEES

Two changes in the personnel of the Board of Trustees occurred during the year. Dr. Michael F. Walsh, on succeeding Dr. James F. Rockett as State Director of Education in February, automatically replaced Dr. Rockett as ex-officio member of the Board. Likewise, the vacancy caused by the resignation of John B. Dunn last spring was filled during the summer by the appointment of Dr. Joseph Belliotti. Under revised by-laws of the Board of Trustees, John F. Brown became Chairman of the Board, succeeding A. Livingston Kelley, and Mr. Francis McCanna became Vice Chairman and Secretary of the Board.

RULES AND REGULATIONS

As the college has grown, we have become increasingly conscious of the need for a declaration of policies and objectives, a clear plan of the administrative organization and a definition of the responsibilities of the several college officers. Heretofore there has been no compilation of rules and regulations governing the varied operations of the college. During the past year certain representative faculty members and administrative officers have constituted a college committee on policy. Altogether the committee has met thirty-three times. From their long hours of constructive deliberation has emerged a system of faculty and administrative organization, rank, promotion, tenure, salaries, and leave of absence including definition of duties of officers, faculty members, and committees. The rules and regulations formulated by the committee were approved by the faculty, and on April 9, 1947, were adopted by the Board of Trustees. Subsequently they were incorporated

along with an organization chart, business procedures, and a digest of the state employees' retirement system, in a mimeographed manual of Rules and Regulations. In the preparation of these rules and regulations, the Committee on Policy has performed a valuable service which represents a new chapter of cooperation between faculty and administration.

The recommendations provide that the committee shall be given a permanent status. Its function will be to study college policies and procedures as occasion indicates, and to formulate recommendations for presentation to the faculty and the Board of Trustees.

BUILDING PROGRAM

Perhaps the most important achievement in the past year and the one which gives us the greatest confidence and hope for the future is the beginning of our permanent building program. Thanks to the support of Governor Pastore and the members of the General Assembly, the proposed bond issues of \$750,000 for the chemistry building and of \$1,200,000 for self-liquidating dormitories were approved for submission to the electorate and were endorsed by a seven to one vote in a special election held on June twenty-fourth. The State Coordinating Commission moved with expedition and designated Mr. John Hogan as architect for the chemistry building and Mr. Albert Harkness as architect for the dormitories. It is proposed to place the chemistry building on the lot south of Quinn Hall and the dormitories on the hillside west of the quadrangle.

Progress has been made also in raising funds for the Memorial Union. The campaign is being sponsored by the Alumni Association and to date approximately \$100,000 has been subscribed toward the total of \$350,000. To complete the job, the alumni will need the help of friends of the college outside the alumni body, and to assist us in this effort, a special committee of prominent citizens has been organized, headed by Mr. T. P. Hazard of Peace Dale. It is hoped that reasonably soon we may have sufficient funds to enable us to proceed with construction. It is proposed to place the union on the west side of Lower College Road, just beyond the parking lot.

The one disappointment in our building program was the failure to secure approval for the proposed gymnasium-armory. This building is one of our most urgent needs and now heads the list in priority. With a conditional appropriation of \$350,000 already made for the purpose, it is our earnest hope that sufficient funds for the erection of an adequate physical education plant will be made available next year.

WATER SYSTEM

With the recent increase in the college population, the current water system has proved to be inadequate for college needs. During a critical period of two or three weeks last fall, the present pumps and pipe lines were not equal to the task of maintaining a sufficient head of water to supply the college buildings. However, a temporary auxiliary pump was installed, and a complete survey of the system was made by the State Department of Public Works. The Department recommended the installation of new pumps and new mains, at a cost of approximately \$90,000. This sum was voted by the General Assembly, and steps have been taken to make the new installations. Plans and specifications were prepared by the State Department of Public Works. It is expected that the new system, adequate to accommodate the growth of the college in years to come, will be installed before the end of the year. We are deeply indebted to the State Department of Public Works for its valuable assistance in this project.

I wish also to thank Governor Pastore, and other State officials, including members of the several State Departments, who have cooperated with us in the authorization of our new building projects, in the procuring of temporary facilities, and in the expansion of our annual budget in order to meet the extraordinary demands of the times.

FACULTY HOUSING

As at other institutions, one of our most acute problems is the need for adequate faculty housing. Housing facilities in the vicinity of the campus are woefully inadequate to accommodate our growing faculty. Members of the faculty are scattered in homes all the way from Providence to Point Judith. Many of them are living in quarters far below the standards

normally associated with the dignity and the minimum degree of comfort and convenience commonly acceptable to the teaching profession. This is a serious handicap to the college in maintaining esprit de corps in the college. It is a handicap because it is difficult to have a spirit of unity and solidarity in a group so widely scattered; it is a handicap also in attracting new faculty members to the college.

We have not yet found a permanent solution, but we have resorted to temporary expedients. We have established a faculty housing service, which has assisted in locating private homes for sale and for rent. The development at Fort Kearney has accommodated some faculty members who are veterans of the recent war. The leasing of the Kingston Inn has made it possible to house a number of unmarried staff members and provide a faculty dining room during the academic year. The French property in Kingston village was purchased, and is now being studied as a possible site for faculty homes. Likewise, we have taken up with life insurance companies the possibility of erecting a faculty housing development on or near college property. It is urgent that before the end of the current year we shall agree upon a policy and a program to meet this pressing need.

FACULTY SALARIES

Early in the year the Committee on Policy recommended a salary schedule for faculty members in the several ranks, which made allowances for the rising cost of living and compared favorably with the salary scales of other institutions. It was the original intent to put the salary schedule into effect during the year 1947-48.

Meanwhile, the State of Rhode Island adopted a plan for augmenting the salaries of public school teachers by appropriating state funds to permit an increase of \$600 for each teacher. In keeping with this policy, state funds were made available to permit similar increases to members of the State College faculty, subject to the approval of the Board of Trustees. In the opinion of the College Committee on Policy, it seemed wise to accept this general proposal for salary increases for the year 1947-48. Accordingly, the suggested salary scale was adopted in principle for further review and later application.

Meanwhile, the cost of living has continued to rise and faculty salaries are still an acute problem. For the year 1947-48, the median salaries in effect of the several ranks as compared with 1941-42 are as follows:

1941-42			1947-48		
	All	Teaching Only		All	Teaching Only
Professors	\$3800	\$3750	Professors	\$4850	\$4800
Associate Professor	3300	3300	Associate Professor	4200	4150
Assistant Professor	2800	2800	Assistant Professor	3680	3600
Instructors	2000	2000	Instructors	3300	3250

The average salary for all the above ranks combined has risen 29 per cent since 1941-42. This alone is a real achievement. However, it represents no gain with reference to the cost of living which has risen in even greater degree. The rise in the salary level is more than offset by the shrinking purchasing power of the dollar. Unless price levels soon take a turn downward, of which at this time no prospect appears, faculty salaries will remain one of the most acute problems of college administration.

Since the academic quality of the college is determined by the quality of its faculty, and since the college is in competition with other institutions for faculty talent, it must offer an adequate salary scale if it is to maintain its academic program on a high level.

THE COLLEGE BUDGET

The growth of the college, of course, has meant a larger budget. The expenditures for educational and general purposes in 1945-46 were \$1,578,431; in 1946-47 they were \$2,347,619, an increase of 49 per cent. The sources of income were as follows:

Student Fees (including room rentals):		
paid by Veterans Administration.....	\$ 508,999 —	22.4 %
paid by Students.....	402,465 —	17.7 %
State Appropriations:		
for maintenance and operation.....	675,000 —	29.7 %
for special capital expenditures.....	201,460 —	8.8 %
Sales and Miscellaneous.....	252,584 —	11.1 %
Federal Appropriation	234,002 —	10.3 %
Total	\$ 2,274,510 —	100.00%
Other Income:		
Dining Services	361,540	
Special appropriation for water supply system.....	90,000	
	<u>\$ 2,726,050</u>	

In Chart 1 the first circle shows the distribution of college receipts for the year. It is interesting to note that, of the State College dollar, less than 40 cents came from state appropriations; approximately 10 cents from regular federal appropriations; 40 cents from student fees (22 cents paid by the Veterans' Administration and 18 cents paid by the students themselves); 11 cents from sales and miscellaneous sources. The relatively large income from student fees includes reimbursement from the federal government for veterans' education, which under our present contract with the Veterans' Administration is computed on the basis of actual instructional costs. Right now the Federal Government is carrying a very large share of the operating expenses. Looking ahead, as the proportion of veteran students declines, we may anticipate the time when a larger share of the burden will be shifted to the state.

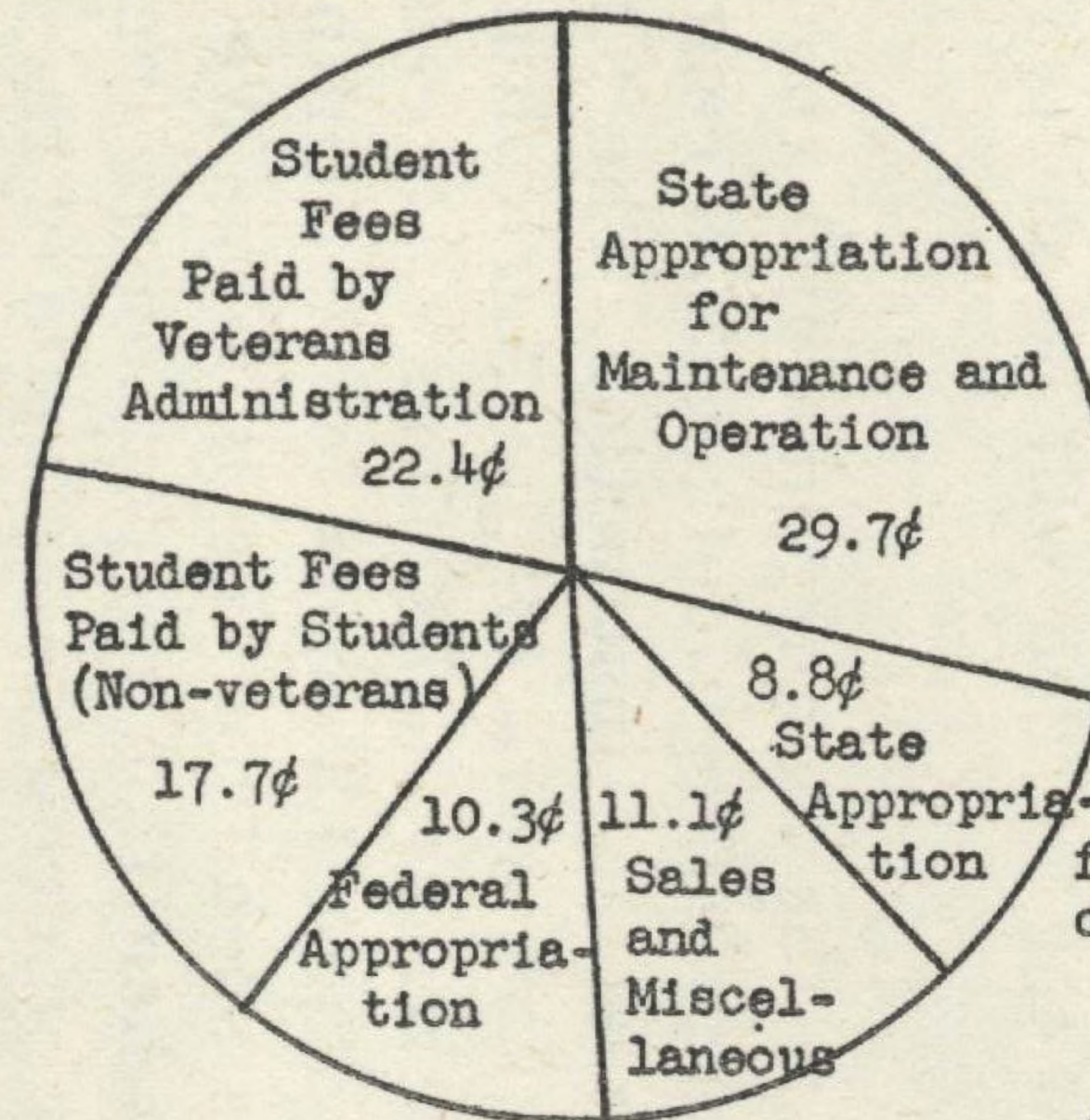
The other circles indicate the manner in which the college dollar is spent. Of the average college dollar, 35.8 cents went toward the direct costs of resident instruction. The 9.2 cents spent for research includes the work of the Agricultural Experiment Station and other research divisions; 3.8 cents was spent for general extension; and 4.3 cents for agricultural extension. Only 1.9 cents was spent for the library. We should look forward to the time when this proportion is increased, since the library is the heart of a college. In spite of the greatly increased burden of administrative duties these days, only 8.6 cents of the college dollar was expended for administration, a decrease from the figures of the past two years. The principal outlay under "other expenses" was for plant operation, which was relatively large because of expensive labor and the high cost of materials.

Perhaps I should point out that, whereas the total operating costs of the college, exclusive of dining services, in 1946-47 were increased 49 per cent over the previous year, the state appropriation for operation (excluding the special appropriation of \$200,000 for Quonset huts) was increased only 23.8 per cent. It was, of course, the substantial increase in income from the Federal Government that eased the burden upon the state.

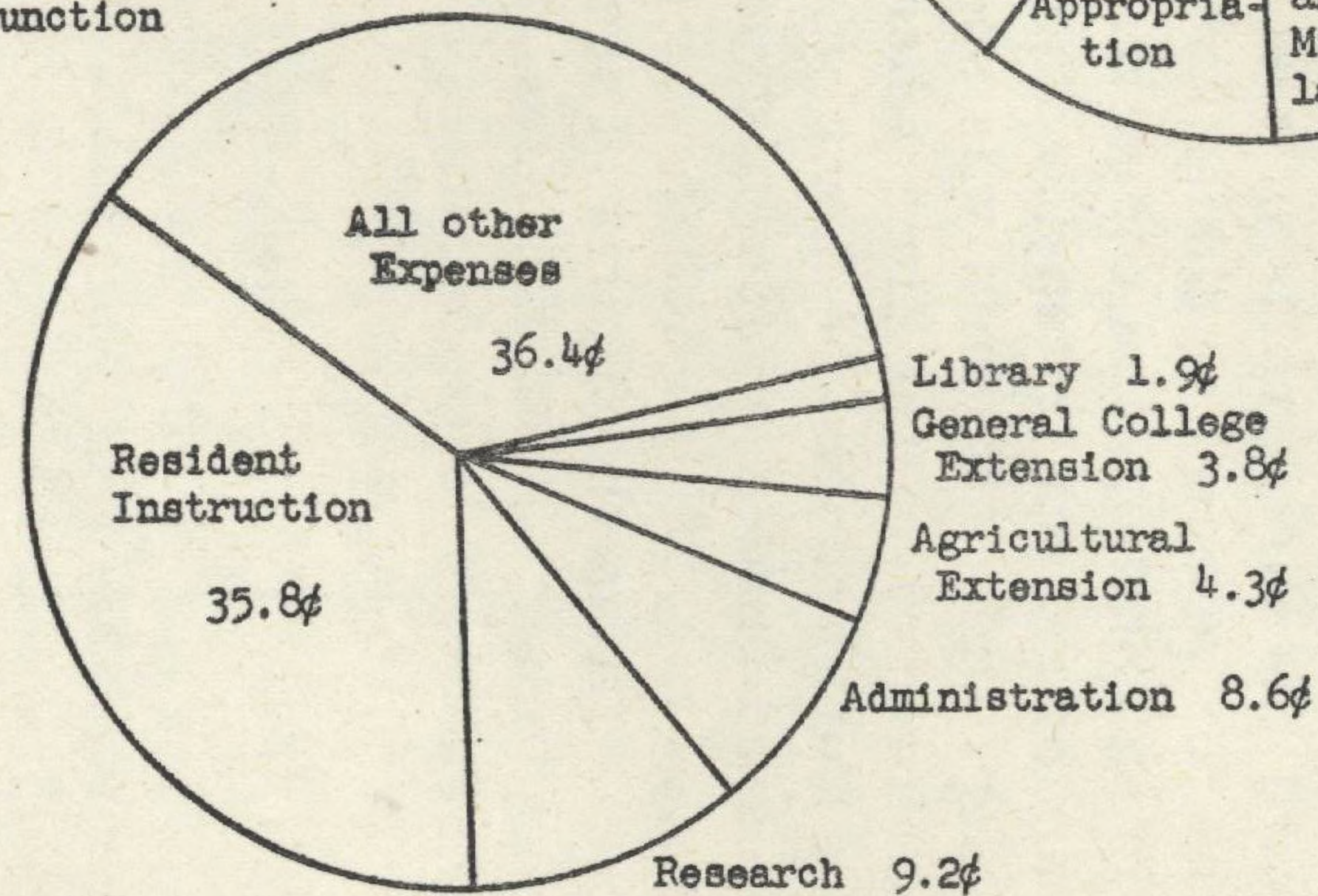
RHODE ISLAND STATE COLLEGE DOLLAR

For the Year Ended June 30, 1947

RECEIPTS



DISBURSEMENTS By Function



DISBURSEMENTS By Object

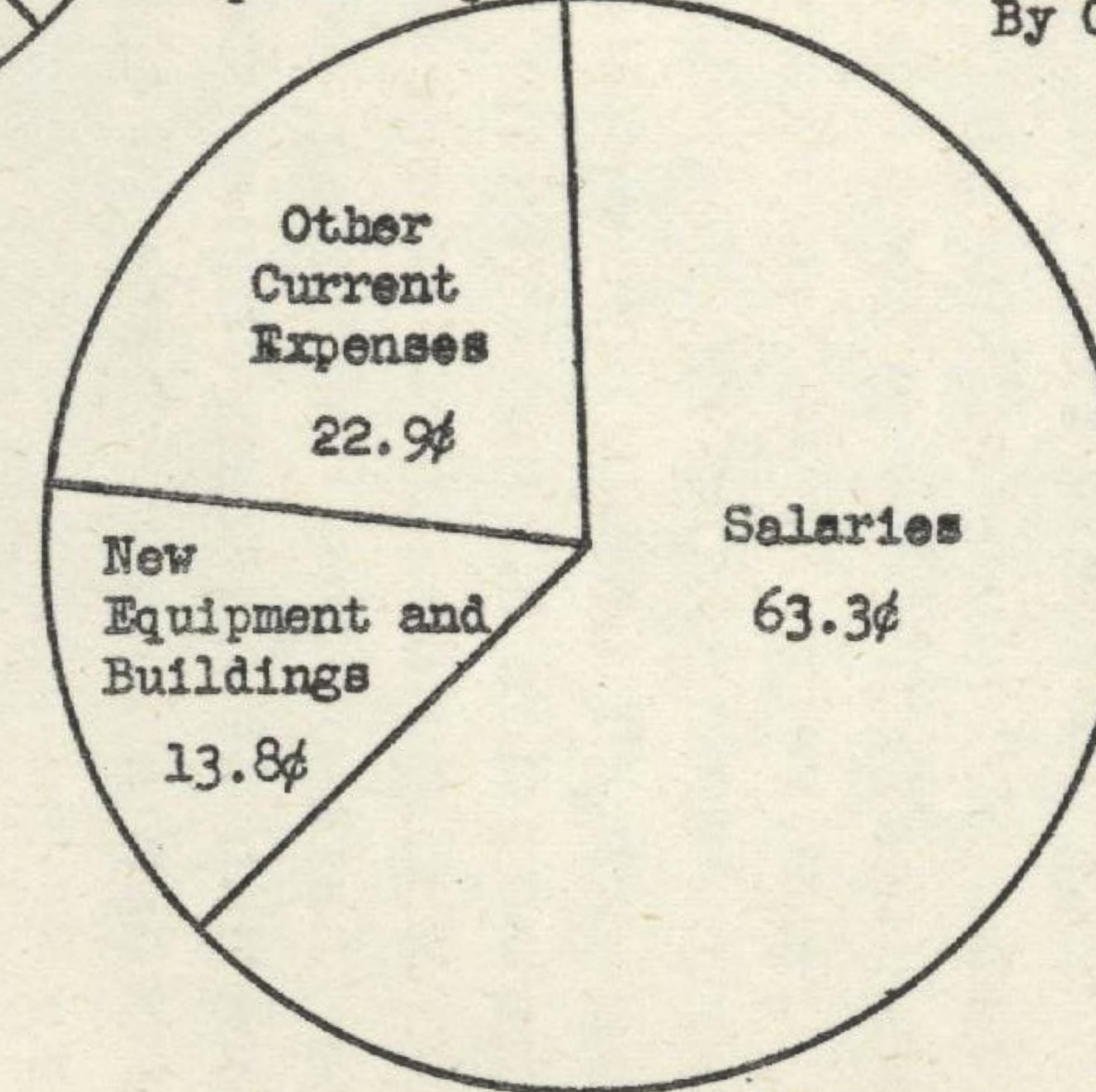


Chart 1 - Distribution of the State College Dollar, 1946-1947

As indicated above, the receipts from dining services last year amounted to \$361,540. We aim to make our dining services self-supporting, and for several years past we have been able to keep the expenditures within the income. Last year, however, we encountered a combination of circumstances which created a serious problem. The board rates were fixed at the beginning of the year, and actually represented a contract with the students. When the sharp increase in food costs struck us, we had the alternatives of raising board rates in the midst of the year, of cutting down on the quantity and quality of servings, or of maintaining our standards and taking a loss. Consequently, for the first time in years expenditures exceeded receipts — by a small margin. We have taken steps to correct this condition and to meet the increased cost of personal services by raising next year's board rates 20 per cent.

ENROLLMENT TRENDS

Fluctuations in college enrollment during the past six years have infinitely multiplied the problems of college administration. The sharp fall of civilian student enrollments during the war was followed by an unprecedented burst of veterans and non-veterans in the post-war years. The enrollment at Rhode Island State College is approximately double the prewar figure, yet the ratio of increase is less than at many land-grant institutions.

All during the war years we were conscious of the need for the development of a long-time policy and program. Basing our estimates upon prewar experience, a ten-year program was announced in 1945, which contemplated an enrollment of 1500 students by 1950 and 2000 by 1955. This reflected our traditional policy of expanding conservatively while being responsive to the needs and demands of the state. The building program announced at that time was based upon these estimates.

However, we could not then anticipate the vast program of Federal aid to veterans and other post-war factors which have stimulated college attendance. Consequently, we greatly underestimated the magnitude of the task that would be laid upon us. This is a good example of how, despite sincere inten-

tion and the best of effort, it is not possible with precision to predict college enrollment many years in advance. Nevertheless, we should continue to do long-term planning on the basis of the best information available, and for this reason try, as nearly as possible, to forecast the enrollment for the next ten years as the basis for our building program. At the same time, we must not be blind to certain prospective influences which cannot at the moment be determined. For example, if the Fed-

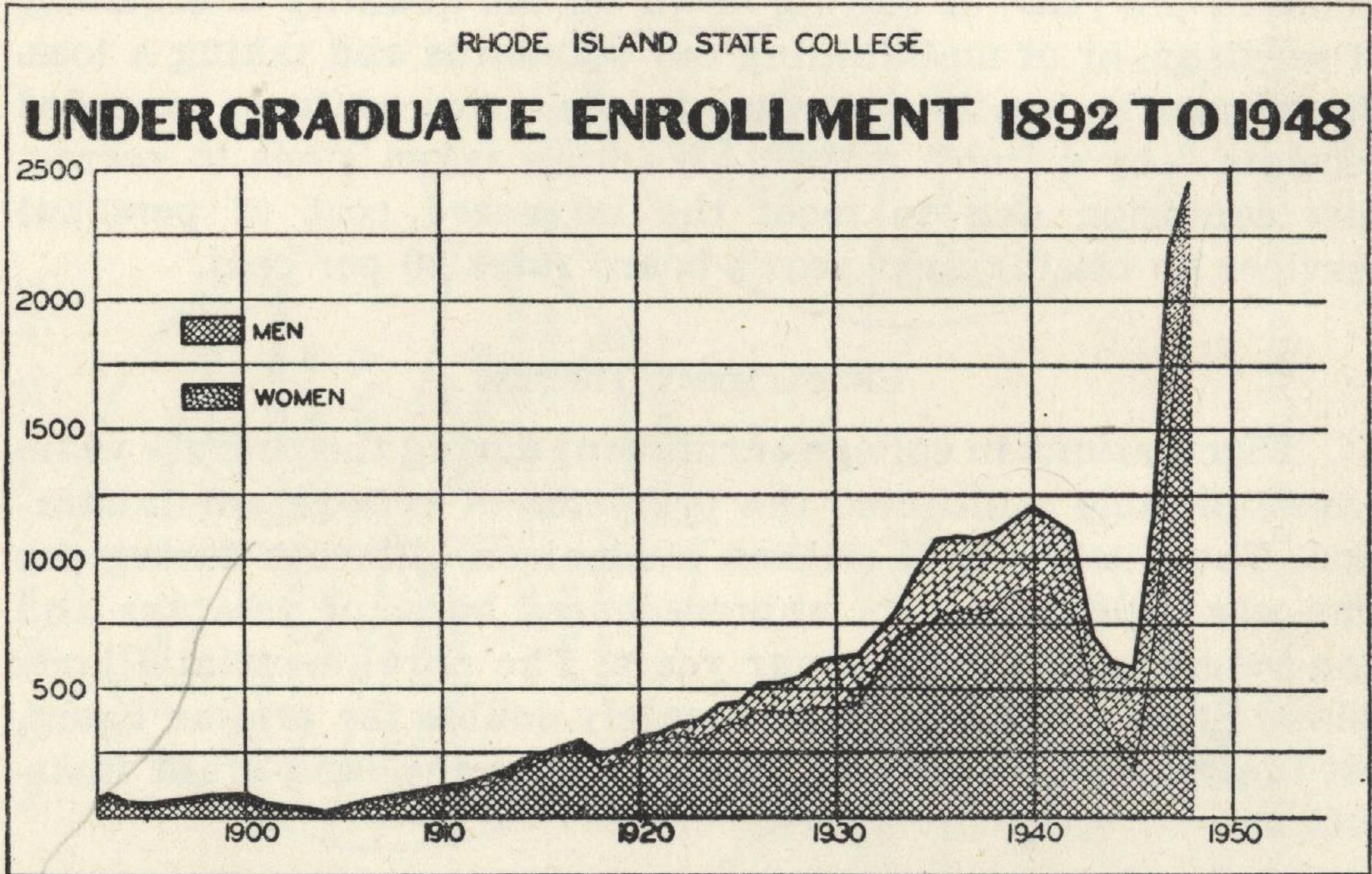


Chart 2 - Undergraduate Enrollment, 1892-1948

eral government adopts a plan of Universal Military Training, how will it affect college enrollments in the future? Again, the President's Commission on Higher Education urges that plans be made for the doubling of present college enrollments by 1960 and proposes a nationwide program of Federal scholarships to aid college students. How should this prospect affect our planning? The Commission also recommends the development of a system of junior colleges. If this program becomes effective, it might have an important bearing upon the future enrollment at the State College.

One thing seems certain: the peak of enrollment due to the presence of veterans will not come until 1950, when the record class which entered in 1946 will reach its senior year. After that we may expect some falling off in total enrollment, but the bulk of evidence indicates numbers far above the prewar level.

In order to find the answers to some of these questions and to plan as intelligently as possible, we have made a number of critical studies in recent weeks. Some of the results are shown in the charts presented here. Chart 2 gives the fall semester

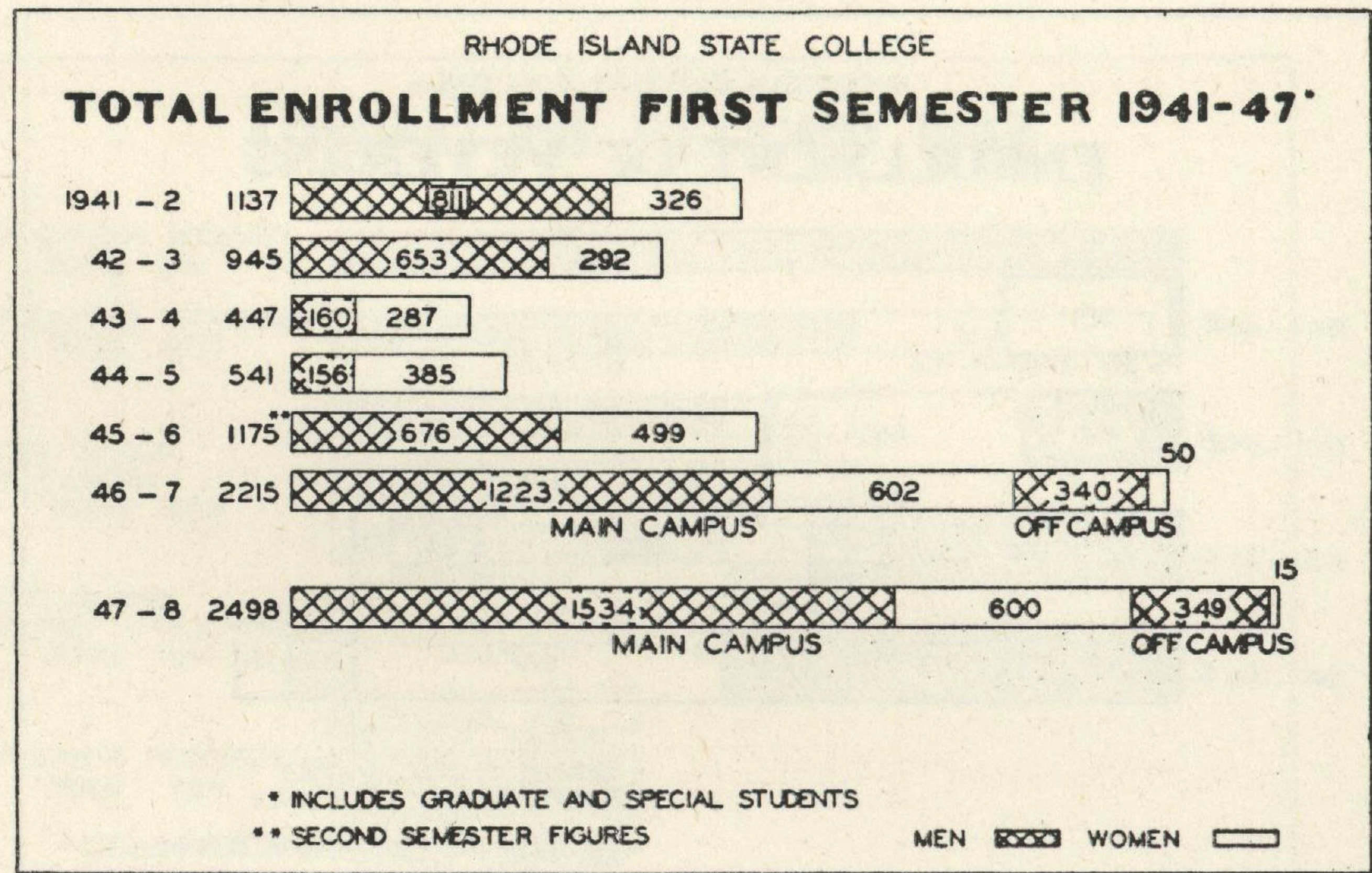


Chart 3 - Enrollment, First Semester, 1941-1947

enrollment of undergraduates, men and women, from the founding of the college in 1892 until the fall of 1948. The normal course of the enrollment curve since 1910, apart from fluctuations due to the war, indicates an approximate doubling of numbers every ten years.

Chart 3 is a more detailed study of enrollment since 1941, showing the sharp fluctuations due to war and post-war conditions. These figures include graduate and special students, and the second semester enrollment is given for the year 1945-46 as being the more representative figure for that year. The en-

rollment in the off-campus centers for the past two years also is given.

Chart 4 shows the trend of enrollment of veterans since 1944, indicating that during the past two years, the veteran students have outnumbered the non-veterans.

The problem of the Office of Admissions is evident from the figures shown in Chart 5. The number of applications for admission received in the fall of 1947 was substantially less than

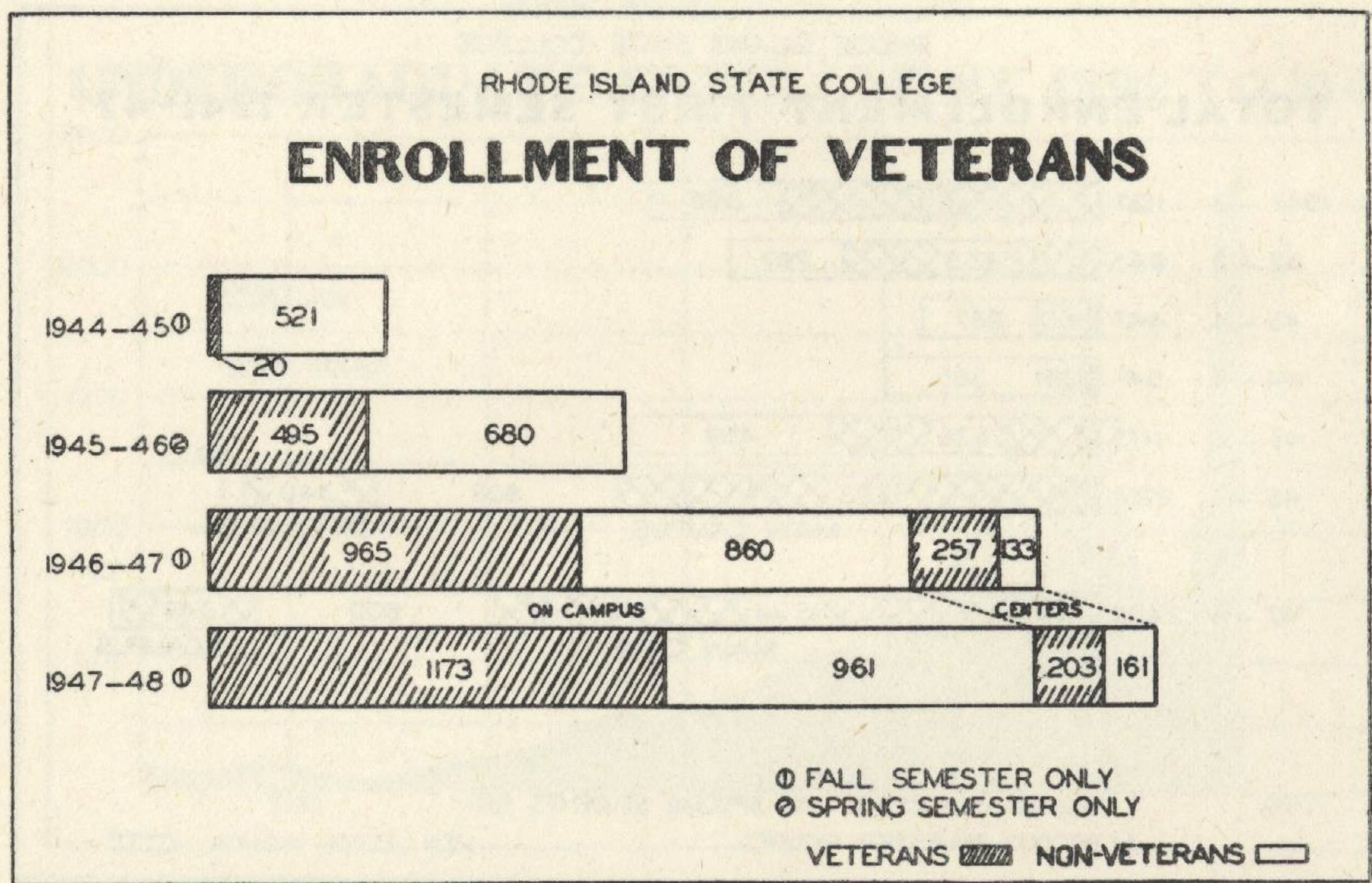


Chart 4 - Enrollment of Veterans, 1944-1947

in the previous year. Among other reasons the peak of veterans' applications had passed, residents of other states were discouraged from applying, and general entrance examinations were required of all candidates. Even so, nearly 2100 applications were processed, and more than one thousand candidates were qualified for admission. Of the Rhode Island candidates qualified, nearly two hundred were rejected because of inadequate accommodations. The total of new registrants was 724, admitted both to the main campus and to the centers, as compared with 917 admitted in 1946.

The changes in enrollment in the past six years are of special interest in their relation to the faculty, the physical plant, and the budget. Chart 6 shows the relation to the size of faculty. In 1940-41, when the enrollment was 1210, we had 91 full-time faculty members with academic rank (instructors, assistant professors, associate professors, and professors.) For purposes of comparison, graduate assistants, part-time instructors, and administrative officers giving part-time teaching are not counted. Likewise members of the Department of Military

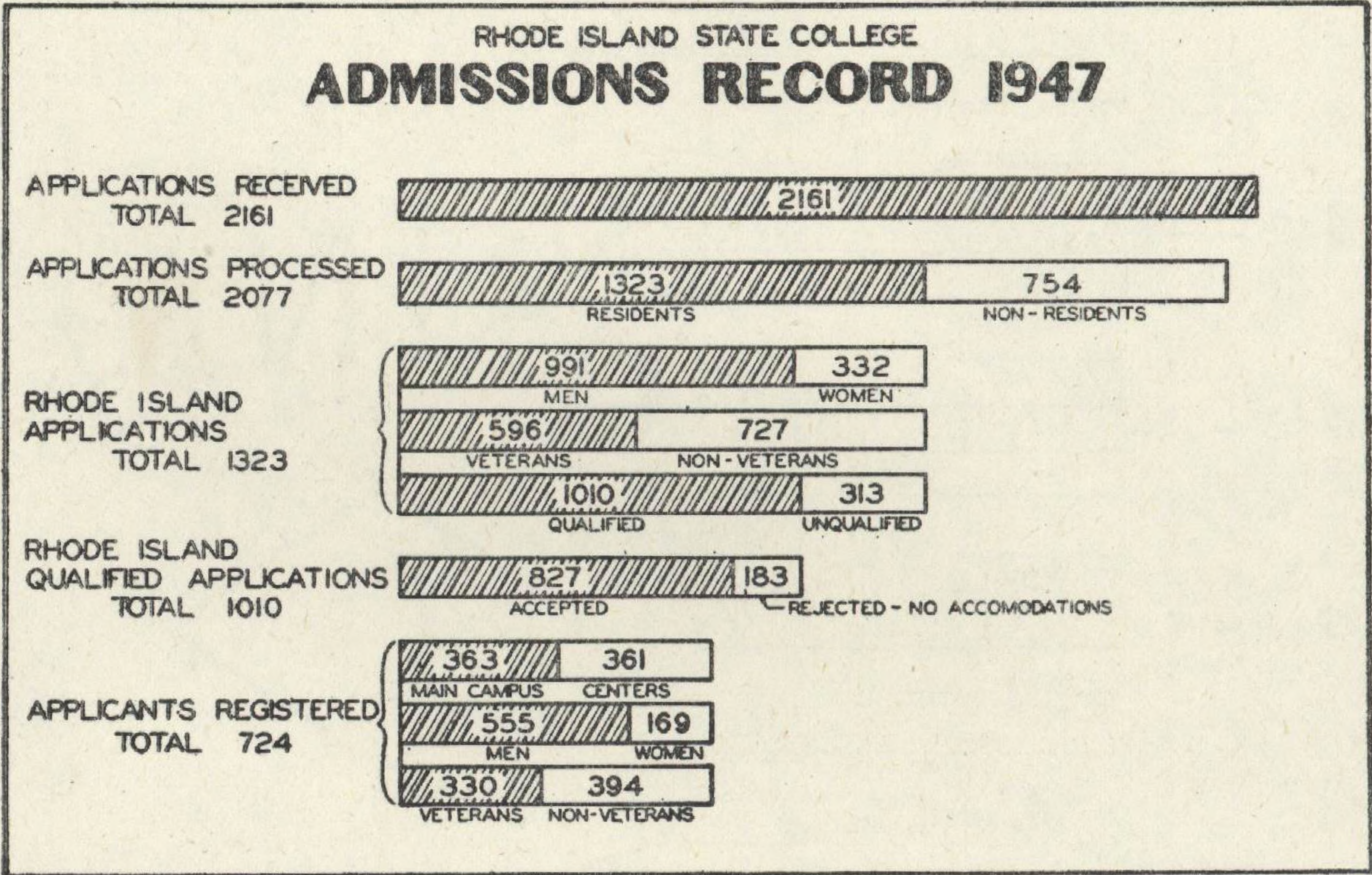


Chart 5 - Admissions Record, 1947

Science are omitted. This gave a faculty-student ratio of 1 to 13.3, that is, there were 13.3 students for every full-time faculty member. With the falling off of enrollment during the war years, the number of students per faculty member declined, reaching the low point in 1944-45. Then the ratio was 1 to 6.1. Enrollment for 1943-44 includes the members of the Army Specialized Training Corps in addition to civilian students. The graphs for 1946-47 and for 1947-48 are of special interest. Despite the competition for college teachers and despite the

RHODE ISLAND STATE COLLEGE

COMPARISON OF RELATIVE GROWTH OF ENROLLMENT FACULTY AND STUDENT RATIO

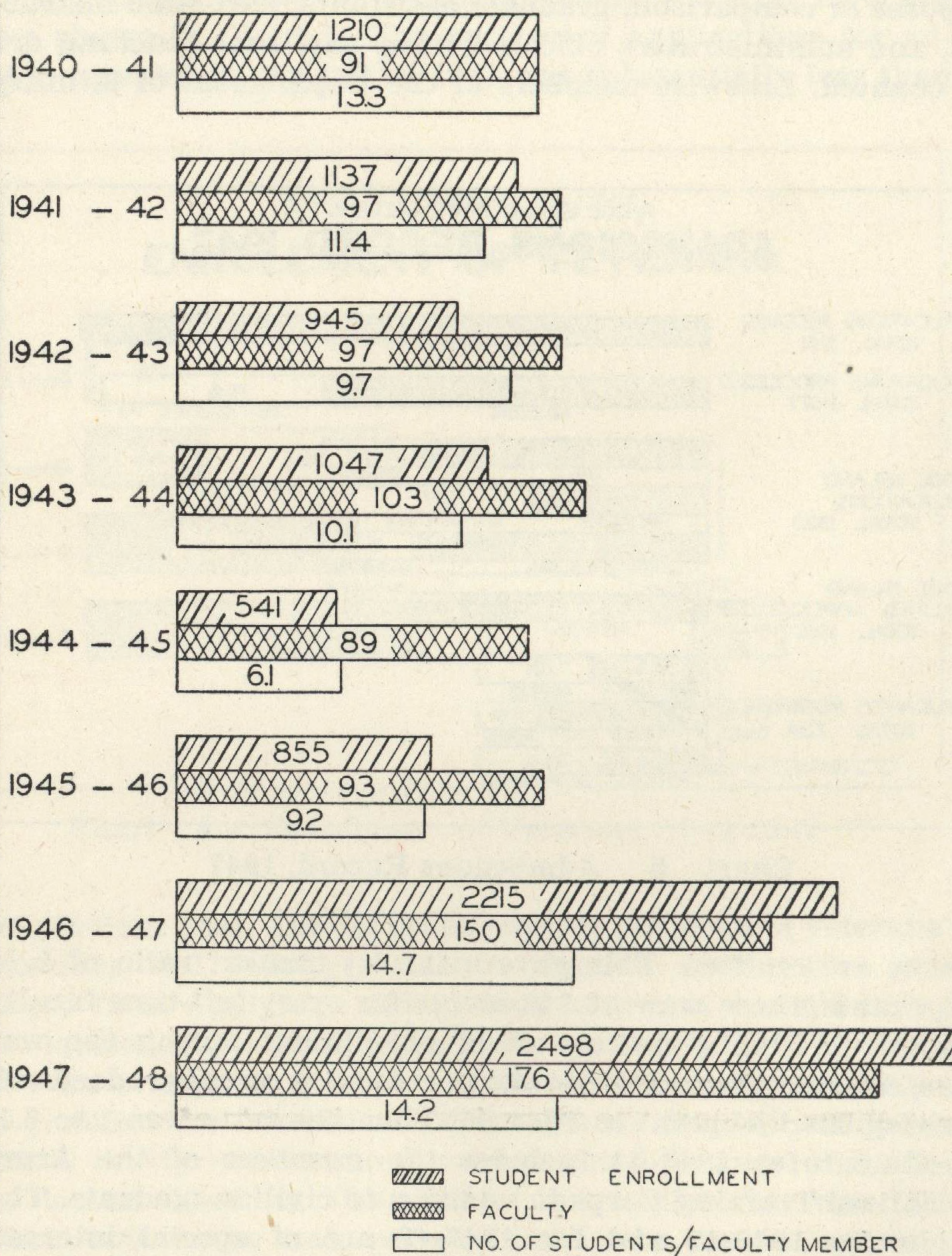


Chart 6 - Student-Faculty Ratio, 1940-1947

great increase in enrollment, we have increased the faculty in proportion (176 this year), and have thereby kept the ratio very close to the prewar figure. We have avoided excessively large class sections. Our faculty-student ratio last year was 1 to 14.7. The lowering of the ratio this year to 1 to 14.2 reflects our effort to safeguard academic standards by keeping class sections small enough for efficient instruction and avoiding overloads for the teaching staff.

COST PER STUDENT

Often we are asked about the cost per student. This is a fair question and a significant one. Because of many variable factors, it is not always easily answered. Particularly is this true at an institution like a land-grant College which has a varied program of research and extension in addition to regular undergraduate instruction.

In estimating the cost per student, it is necessary first to eliminate expenditures that do not apply, for example, federal experiment station funds and state funds applied to such items as egg-laying contests, feed and fertilizer analysis, summer school, extension courses, and auxiliary enterprises which are self-supporting, such as dining services and the bookstore. Furthermore, to determine accurately the cost of instruction, the overhead services for such items as the library, the business office, and the use of buildings must be pro-rated among the functions of research, extension, and resident instruction.

Using the average enrollment per semester, including graduate students, and that portion of the operating budget that is applicable to full-time students, the cost per student in 1945-46, with an average enrollment of 1015 was \$719. In 1946-47 with a large increase in average enrollment, much larger proportionately than the increase in budget, the cost per student fell to \$480. But, despite a continued increase in enrollment during the current year (1947-48), we cannot expect a further reduction in the cost per student. The sharp increase in costs of operation, including the \$600 salary increase for faculty members, have more than offset the potential savings which might have come from handling large numbers with the same administrative overhead had other factors remained constant. Consequently

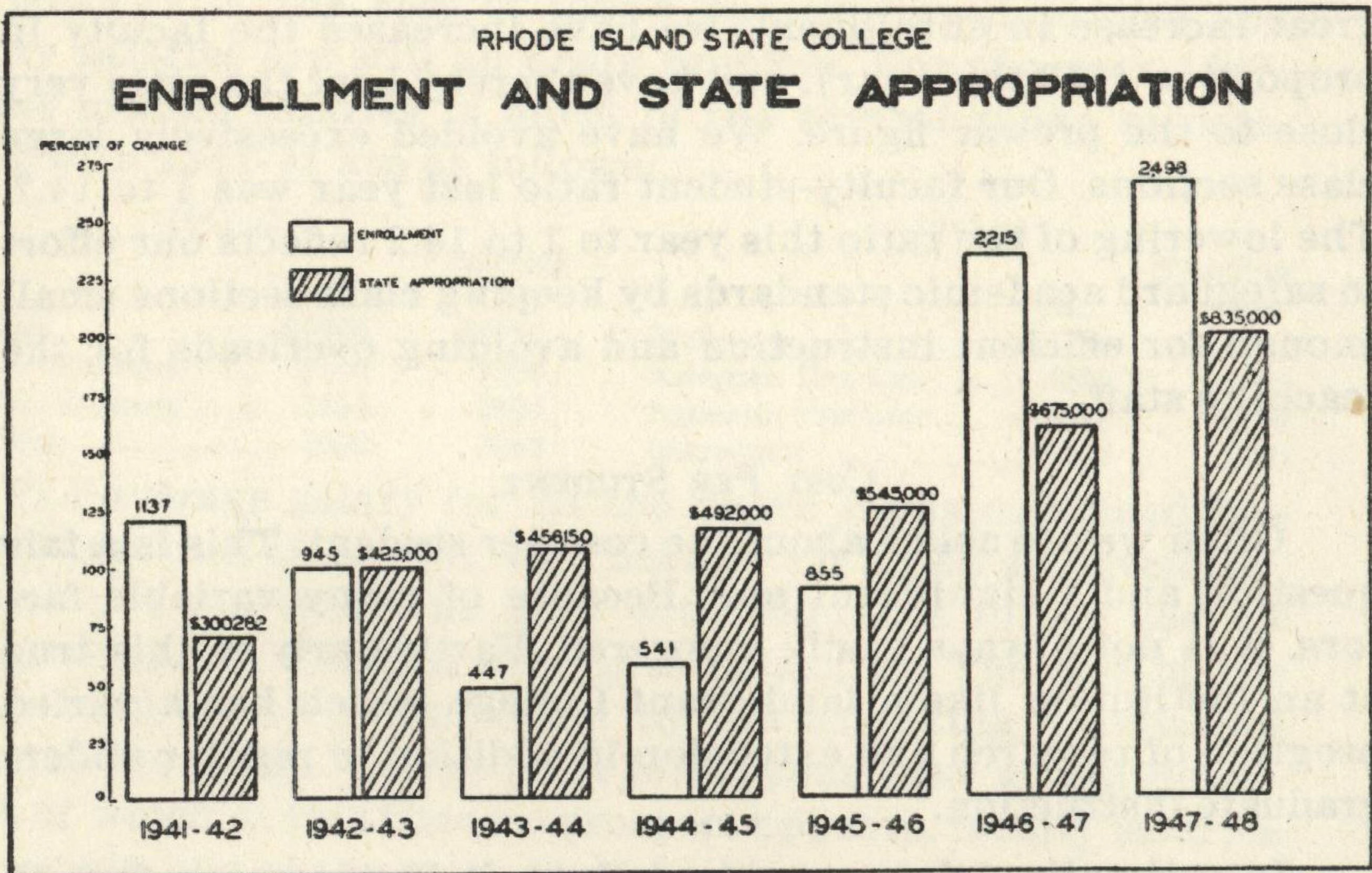


Chart 7 - Relation of Enrollment to State Appropriation, 1941-1947

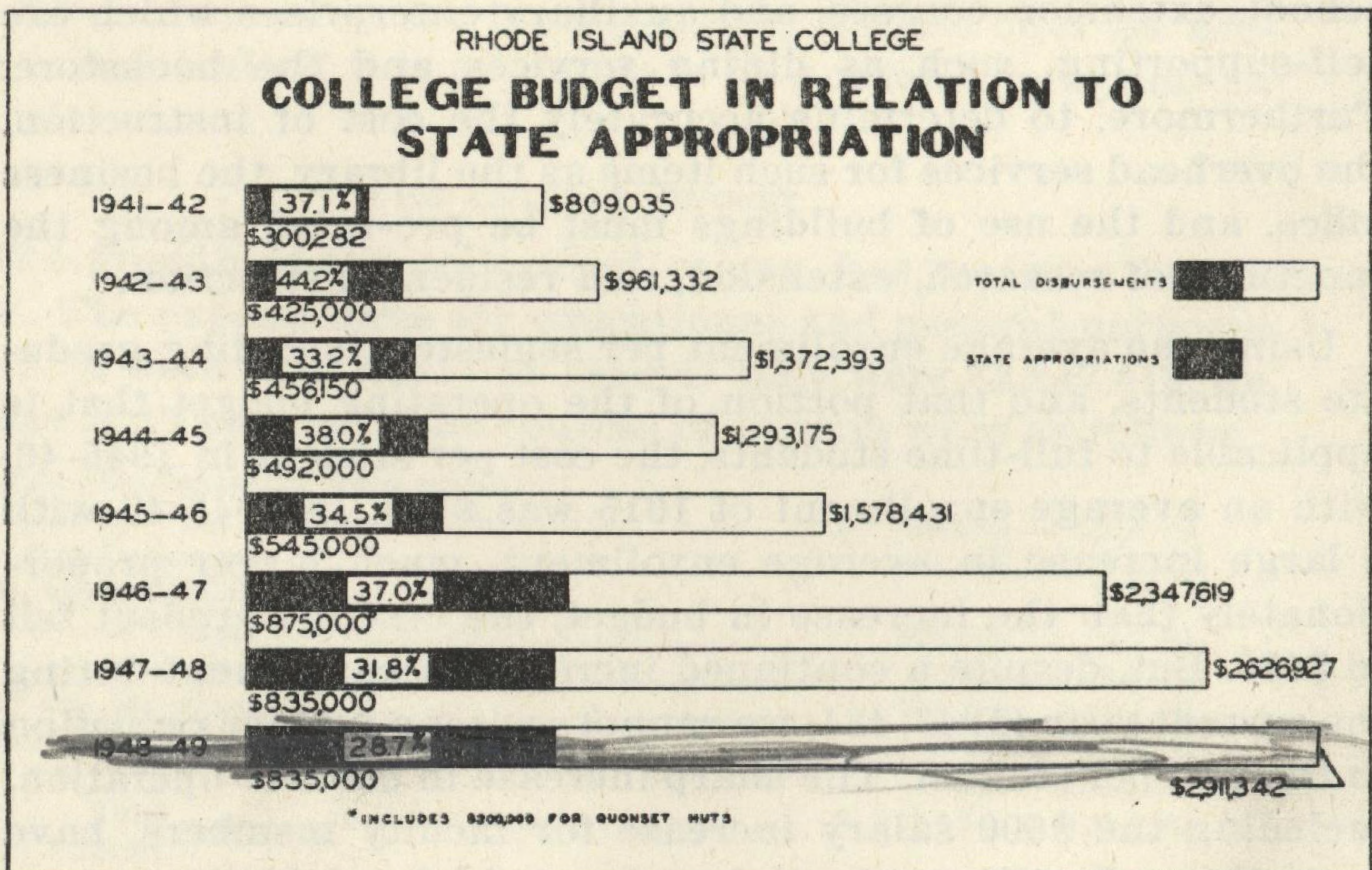


Chart 8 - College Budget in Relation to State Appropriation, 1941-1948

during 1947-48 we may expect a rise in per student costs. The precise figure will not be known until the close of the year.

STATE FUNDS AND THE BUDGET

Charts 7 and 8 deal with the college budget. Chart 7 shows how the state appropriation has risen in relation to the growing enrollment. In the past two years the enrollment has increased much more rapidly than the state appropriations. This is indicated in another way by Chart 8, which shows the state appropriation in relation to the total college budget. Whereas in 1941-42 the state appropriation represented 40.4 per cent of the budget, and in 1942-43, 48.1 per cent, in 1947-48 the state appropriation is only 31.8 per cent of the present operating budget. The principal reason for the current low percentage of the state appropriation, as suggested in the foregoing pages, is the large proportion of the college budget now received from the Veterans Administration as reimbursement for the educational services to veterans.

Chart 9 is a graphic summary of the growth of the college during the past two years. In the current year (1947-48) as compared with 1945-46, the enrollment has increased 112.6 per cent. To meet this expansion, the housing capacity has been raised 85.3 per cent and the floor area of the plant 38.0 per cent. Since the buildings added have been principally of a temporary nature, the book value of the plant (with no adjustment for appreciation or depreciation) has advanced only 7.9 per cent. The faculty has been increased 89 per cent, and the total number of full-time employees 76.5 per cent. This growth in the volume of activities is reflected in the college budget, which shows an increase in the estimated disbursements of 66.4 per cent. The increase in the State appropriation, however, has been in much smaller ratio — only 53.2 per cent.

While during the past six years the state appropriation to the college has been substantially increased, its ratio to the total annual expenditure of state funds has changed very little. In other words, the increase in state expenditures at the college has been in approximately the same proportion as the increase in the total state budget. In fact the state appropriation of

\$835,000 for 1947-48 is only 2.4 per cent of the state's total appropriation bill of \$39,946,000. This is precisely the same proportion as in the year 1942-43 and is less than the proportion of the four intervening years. The State College, therefore, while greatly expanding its services during a period of sharply rising costs, has been responsible for only a small fraction of the increase in the state budget. Furthermore, it has expanded its services without incurring an operating deficit. While some

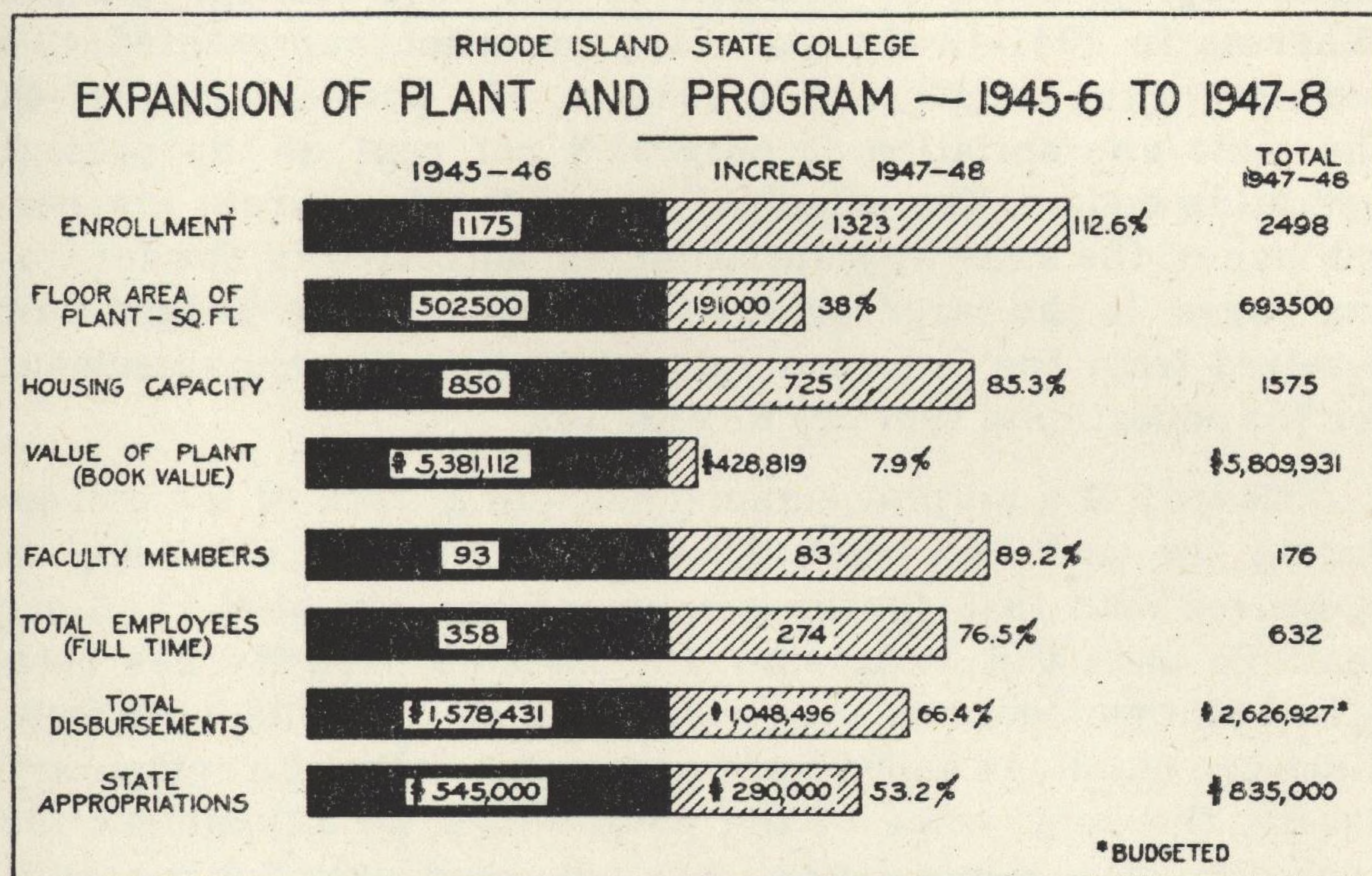


Chart 9 - Development of Plant and of Program, 1945-46 to 1947-48

state departments because of changes in program and unforeseen demands have been obliged to ask the state for deficiency appropriations, not once in six years has the college done so. By careful planning and avoiding unnecessary expenditures, we have managed to close each fiscal year with a modest balance which has been carried over to the next year's budget. This record reflects a standard of public economy and efficiency of management in which we take considerable pride. We have no desire to boast about it. Yet we mention it without apology be-

cause the people of the state are entitled to know in what manner their tax dollars are spent.

THE FUTURE OF THE COLLEGE

In determining future enrollment, we must not lose sight of the basic mission of the college, namely, service to the people of the state. A state college must be responsive to the needs of its citizens. The college is a part of the public education system of the state. Right now it may seem wise to put a ceiling on the number of students until our building program has reached the stage when we can dispense with the present temporary structures. The decision as to the ultimate size, however, should rest not on plant capacity or cost alone, but upon the resultant of all factors involved, specifically the educational and social needs, the cultural values and the economic returns.

Frequently we hear it said that the state cannot afford to spend more money for higher education. That same argument was used with reference to elementary schools a hundred years ago and secondary schools fifty years ago. The question is rather, can the state afford NOT to provide its youth, its citizens, its professions, and its industries with services in higher education, research, and extension equal in calibre to those enjoyed by the citizens of other states? Can it afford NOT to provide the kind of educational leadership required of the atomic age?

In setting our future enrollment goals, in planning new buildings, in shaping the program of the college, we would not be true to our public trust if we lost sight of the ultimate purpose of higher education. It is to enrich the lives of our citizens through an understanding of themselves and their environment, to improve their professional competence, to promote their health and wealth, and to cultivate their sense of responsibility as citizens of democracy. Expenditures for the maintenance and operation of the college from both public and private funds are an investment directed toward these ends. Experience has shown that state funds invested in a publicly supported institution of higher learning pay dividends in the economy and in the cultural values of the state.

We who are responsible for the administration of the college have a grave responsibility in directing our programs along sound, constructive lines. The citizens of Rhode Island have reposed in us a tremendous trust. We must be true to that trust; we must discharge that obligation by making the college an agency which will continue year after year to pour into the life of the state a constant stream of scientific and cultural riches which will add to the health, wealth, and happiness of our people.

Let me, in closing, express to the Board of Trustees my appreciation for the encouragement and assistance they have given me in many ways and for their devotion to the welfare and progress of the college.

Respectfully submitted,

CARL R. WOODWARD, *President*

November 28, 1947

Report of the Registrar

HEREWITH are the statistics of enrollment for the two semesters of the academic year 1946-1947. The total enrollment, excluding duplicates, was as follows:

	Men	Women	Total
Graduate students.....	38	13	51
Four-year students.....	1535	613	2148
Irregular students.....	16	19	35
Total.....	1589	645	2234

Table 1 indicates enrollment of students as of October 1 for the years 1942 to 1946 inclusive:

TABLE 1

Class	1942	1943	1944	1945	1946
Graduate.....	18	10	5	3	27
Senior.....	178	77	42	54	146
Junior.....	190	82	57	89	282
Sophomore.....	224	91	97	208	660
Freshman.....	328	180	332	484	1068
Irregular.....	7	7	8	17	32
Total.....	945	447	541	855	2215

Table 2 indicates number of new and previous matriculants in each class, with division by sex:

TABLE 2

September 16, 1946, to February 9, 1947

Class	Date of Matriculation				Total	
	Previous to September, 1946		September, 1946			
	Men	Women	Men	Women	Men	Women
Graduate.....	15	1	7	4	22	5
Senior.....	84	61	1	0	85	61
Junior.....	167	114	1	0	168	114
Sophomore.....	441	212	6	1	447	213
Freshman.....	129	22	696	221	825	243
Irregular.....	15	10	1	6	16	16
Total.....	851	420	712	232	1563	652

January 30 to June 8, 1947

Class	Date of Matriculation				Total	
	Previous to January, 1947		January, 1947			
	Men	Women	Men	Women	Men	Women
Graduate	29	9	5	2	34	11
Senior	112	67	0	1	112	68
Junior	138	99	1	0	139	99
Sophomore	432	169	6	1	438	170
Freshman	727	214	7	1	734	215
Irregular	6	13	6	1	12	14
Total	1444	571	25	6	1469	577

Table 3 gives the distribution of students in curricula for each semester of the year 1946-1947.

TABLE 3
September 16, 1946 to February 9, 1947

Curricula	Senior		Junior		Sophomore		Freshman		Irregular		Graduate		Total		Total
	M	W	M	W	M	W	M	W	M	W	M	W	M	W	
SCHOOL OF AGRICULTURE															
Agriculture.....	10	0	9	0	28	2	52	0	0	0	0	0	99	2	101
SCHOOL OF BUSINESS ADMINISTRATION															
Accounting.....	2	1	12	6	32	0	0	0	0	0	0	0	46	7	53
General.....	6	0	7	2	33	5	0	0	0	0	0	0	46	7	53
Industrial Management.....	1	0	1	0	16	2	0	0	0	0	0	0	18	2	20
Marketing & Advertising.....	1	1	9	5	39	9	0	0	0	0	0	0	49	15	64
Secretarial Science.....	0	1	0	5	0	6	0	0	0	0	0	0	0	12	12
Undesignated.....	0	0	0	0	0	0	307	32	0	0	0	0	307	32	339
Total Business Administration.....	10	3	29	18	120	22	307	32	0	0	0	0	466	75	541
SCHOOL OF ENGINEERING															
Chemical.....	4	0	7	0	23	0	0	0	0	0	0	0	34	0	34
Civil.....	8	1	14	1	23	0	0	0	0	0	0	0	45	2	47
Electrical.....	5	1	20	0	67	1	0	0	0	0	0	0	92	2	94
Mechanical.....	18	0	51	0	73	2	0	0	0	0	0	0	142	2	144
Aeronautics.....	8	0	15	2	0	0	0	0	0	0	0	0	23	2	25
Physics.....	0	0	5	0	5	2	0	0	0	0	0	0	10	2	12
Undesignated.....	0	0	0	0	0	0	301	4	0	0	0	0	301	4	305
Total Engineering.....	43	2	112	3	191	5	301	4	0	0	0	0	647	14	661
SCHOOL OF HOME ECONOMICS															
Child Development.....	0	2	0	8	0	0	0	0	0	0	0	0	0	10	10
General.....	0	5	0	6	0	0	0	0	0	0	0	0	0	11	11
Institution Management.....	0	13	0	11	0	0	0	0	0	0	0	0	0	24	24
Teacher Training.....	0	2	0	1	0	0	0	0	0	0	0	0	0	3	3
Textiles.....	0	3	0	10	0	0	0	0	0	0	0	0	0	13	13
Undesignated.....	0	0	0	0	0	66	0	92	0	0	0	0	0	158	158
Total Home Economics.....	0	25	0	36	0	66	0	92	0	0	0	0	0	219	219
Nursing.....	0	2	0	0	0	10	0	17	0	0	0	0	0	29	29
SCHOOL OF SCIENCE															
Biological Laboratory Technology	0	6	0	12	0	16	0	8	0	0	0	0	0	42	42
Biology.....	8	3	7	7	16	5	17	4	0	0	0	0	48	19	67
Chemistry.....	8	3	5	2	16	5	3	0	0	0	0	0	32	10	42
General Teacher Training.....	0	7	1	11	7	24	1	16	0	0	0	0	9	58	67
Liberal Studies.....	0	8	0	22	26	53	21	19	0	0	0	0	47	102	149
Mathematics.....	0	1	0	1	1	1	0	0	0	0	0	0	1	3	4
Physical Education.....	5	0	2	0	17	0	40	0	0	0	0	0	64	0	64
Pre-Medicine.....	1	1	3	2	21	2	0	0	0	0	0	0	25	5	30
Undesignated.....	0	0	0	0	4	2	83	51	0	0	0	0	87	53	140
Total Science.....	22	29	18	57	108	108	165	98	0	0	0	0	313	292	605
UNDESIGNATED.....	0	0	0	0	0	0	0	0	16	16	22	5	38	21	59
Undergraduate Totals.....	85	61	168	114	447	213	825	243	16	16	22	5	1525	631	2156
Grand Total.....	146		282		660		1068		32		27		1563	652	2215

TABLE 3 — Continued
January 30 to June 8, 1947

Curricula	Senior		Junior		Sophomore		Freshman		Irregular		Graduate		Total		Total
	M	W	M	W	M	W	M	W	M	W	M	W	M	W	
SCHOOL OF AGRICULTURE															
Agriculture.....	9	0	4	0	29	2	48	0	0	0	0	0	90	2	92
SCHOOL OF BUSINESS ADMINISTRATION															
Accounting.....	3	1	11	4	27	0	0	0	0	0	0	0	41	5	46
General.....	10	1	10	0	32	4	0	0	0	0	0	0	52	5	57
Industrial Management.....	1	1	2	0	17	0	0	0	0	0	0	0	20	1	21
Marketing & Advertising.....	3	2	10	4	38	8	0	0	0	0	0	0	51	14	65
Secretarial Science.....	0	0	0	3	0	7	0	0	0	0	0	0	0	10	10
Undesignated.....	0	0	0	0	8	0	275	28	0	0	0	0	283	28	311
Total Business Administration.....	17	5	33	11	122	19	275	28	0	0	0	0	447	63	510
SCHOOL OF ENGINEERING															
Chemical.....	2	0	8	0	17	0	0	0	0	0	0	0	27	0	27
Civil.....	11	1	10	0	23	0	0	0	0	0	0	0	44	1	45
Electrical.....	7	0	16	0	65	1	0	0	0	0	0	0	88	1	89
Mechanical.....	29	0	32	0	69	1	0	0	0	0	0	0	130	1	131
Aeronautics.....	12	0	13	1	0	0	0	0	0	0	0	0	25	1	26
Physics.....	3	0	2	0	3	2	0	0	0	0	0	0	8	2	10
Undesignated.....	0	0	0	0	0	0	261	4	0	0	0	0	261	4	265
Total Engineering.....	64	1	81	1	177	4	261	4	0	0	0	0	583	10	593
SCHOOL OF HOME ECONOMICS															
Child Development.....	0	3	0	2	0	0	0	0	0	0	0	0	0	5	5
General.....	0	1	0	10	0	0	0	0	0	0	0	0	0	11	11
Institution Management.....	0	8	0	4	0	0	0	0	0	0	0	0	0	12	12
Teacher Training.....	0	8	0	7	0	0	0	0	0	0	0	0	0	15	15
Textiles.....	0	3	0	12	0	0	0	0	0	0	0	0	0	15	15
Undesignated.....	0	0	0	0	0	54	1	119	0	0	0	0	1	130	131
Total Home Economics.....	0	23	0	35	0	54	1	119	0	0	0	0	1	188	189
Nursing.....	0	1	0	0	0	10	0	16	0	0	0	0	0	27	27
SCHOOL OF SCIENCE															
Bacteriology.....	1	1	1	2	0	2	1	0	0	0	0	0	3	5	8
Biological Laboratory Technology.....	0	8	0	8	0	7	0	8	0	0	0	0	0	31	31
Biology.....	4	0	1	3	36	9	20	5	0	0	0	0	61	17	78
Botany.....	1	1	0	0	0	0	0	1	0	0	0	0	1	2	3
Chemistry.....	4	2	3	0	16	5	4	1	0	0	0	0	27	8	35
General Teacher Training.....	3	6	2	11	10	18	3	15	0	0	0	0	18	50	68
Liberal Studies.....	1	17	2	22	27	36	23	26	0	0	0	0	53	101	154
Mathematics.....	1	1	0	0	0	2	0	0	0	0	0	0	1	3	4
Physical Education.....	4	0	7	0	15	0	32	0	0	0	0	0	58	0	58
Pre-Medicine.....	2	0	1	2	0	0	0	0	0	0	0	0	3	2	5
Zoology.....	1	2	4	3	3	0	0	0	0	0	0	0	8	5	13
Undesignated.....	0	0	0	1	3	2	66	35	0	0	0	0	69	38	107
Total Science.....	22	38	21	52	110	81	149	91	0	0	0	0	302	262	564
UNDESIGNATED.....	0	0	0	0	0	0	0	0	12	14	34	11	46	25	71
Undergraduate Totals.....	112	68	139	99	438	170	734	215	12	14	34	11	1423	552	1975
Grand Total.....	180		238		508		949		26		45		1469	577	2046

The home residence of students enrolled in the degree curricula in all classes: September 16, 1946, to June 8, 1947, is given in Table 4.

TABLE 4

A. Resident in Rhode Island by Counties and Towns:

Bristol:	
Barrington	28
Bristol	50
Warren	13
	—
	91

Kent:	
Coventry	15
East Greenwich	34
Warwick	81
West Warwick	36
	—
	166

Newport:	
Jamestown	16
Little Compton	1
Newport	120
Portsmouth	6
Tiverton	8
	—
	151

Providence:	
Burrillville	5
Central Falls	40
Cranston	166
Cumberland	16
East Providence	69
Glocester	2
Johnston	13
North Providence	37
Pawtucket	170
Providence	594
Scituate	12
Smithfield	22
Woonsocket	64
	—
	1239

Washington:	
Exeter	1
Hopkinton	12
Narragansett	23
North Kingstown	41
Richmond	15
South Kingstown	120
Westerly	83
	—
	295

B. Resident outside the State:

California:	
Pomona	1
Connecticut:	
Bristol	2
Broad Brook	2
Colchester	1
East Hartford	1
Grosvenor Dale	1
Groton	3
Mystic	3
New London	3
Old Lyme	2
Rowayton	1
Saugatuck	1
Shelton	1
Short Beach	1
Sterling	1
Stonington	1
Stratford	1
Torrington	1
West Hartford	1
	—
	27

District of Columbia:	
Washington	1
Illinois:	
Chicago	1
Decatur	1
	—
	2
Kentucky:	
Danville	1
Maine:	
Biddeford	1
Bridgton	1
Corunna	2
Old Town	1
Portland	1
	—
	6
Maryland:	
Annapolis	1
Massachusetts:	
Attleboro	4
Barrowsville	1
Blackstone	1
Boston	1

Braintree	1
Brockton	2
Brookline	3
Cambridge	1
Chelmsford	1
Chestnut Hill	1
Concord	1
Danvers	1
Dartmouth	1
Dorchester	3
East Douglas	1
Fairhaven	4
Fall River	12
Holyoke	1
Hyannis	2
Lawrence	2
Leominster	1
Magnolia	1
Mattapan	2
Medford	1
Melrose	2
Middleboro	2
Milton	1
New Bedford	8
Newton Highlands	1
North Attleboro	3
North Dartmouth	1
North Quincy	1
Norton	1
Pittsfield	1
Plymouth	1
Rehoboth	3
Revere	1
Roxbury	1
Sandwich	1
Seekonk	2
Somerville	1
South Boston	1
South Braintree	1
Springfield	2
Townsend	2
Wakefield	1
Wareham	1
Wellesley	1
Westford	1
West Medford	1
Winthrop	2
Worcester	7
Wrentham	1
<hr/>	
102	
New Hampshire:	
Claremont	1
Hillsboro	1
<hr/>	
2	

New Jersey:	
Bogota	2
Caldwell	1
Collingswood	1
Garfield	1
Harrington Park	1
Highland Park	1
Jersey City	1
Kearny	1
Maplewood	1
Oakland	1
Rutherford	1
Short Hills	1
South Orange	1
Teaneck	1
Union City	2
Verona	1
Weehawken	1
<hr/>	
19	

New York:	
Arverne	1
Baldwin	1
Brooklyn	4
East Rockaway	1
Fishers Island	1
Flushing	1
Granville	1
Great Neck	2
Little Neck	1
Mount Vernon	2
Newfield	1
New Rochelle	1
New York City.....	10
Poughkeepsie	1
Rochester	2
Sea Cliff	2
Tarrytown	1
Tuckahoe	1
Woodmere	1
<hr/>	
35	

Ohio:	
Osborn	1

Pennsylvania:	
Bethlehem	3
Drexel Hill	1
Mahanoy Plane	1
Northampton	1
Springfield	1
<hr/>	
7	

Vermont:	
Rochester	1

Total attendance from within the state.....	1942
Total attendance from outside the state.....	206

Preparatory schools represented in the freshman class, September, 1946, to June, 1947, are listed in Table 5.

TABLE 5

In Rhode Island:		Westerly:	
Barrington:		Gov. Samuel Ward Senior High....	37
Leander H. Peck High.....	12	West Warwick High.....	9
Bristol:		Woonsocket:	
Bristol Senior High.....	26	Mount St. Charles Academy.....	5
Colt Memorial High.....	2	Woonsocket High	19
Burrillville High	3		
Central Falls High.....	16	Total from Rhode Island.....	801
Coventry High	11	Equivalency examinations	9
Cranston High	57		
Cumberland High	12	In California:	
East Greenwich High.....	1	Redwood City:	
East Providence:		Sequoia Union High.....	1
East Providence High.....	36	In Canada:	
Providence Country Day School....	4	Montreal:	
St. Mary's Seminary.....	4	Commercial High	1
Little Compton:		In Connecticut:	
Josephine F. Wilbur School.....	2	Ansonia High	1
Newport:		Avon School	1
De La Salle Academy.....	12	Danielson:	
Rogers High	55	Killingly High	1
St. Catherine Academy.....	1	East Hartford High.....	1
North Kingstown High.....	8	New London:	
North Providence High.....	14	Admiral Billard Academy.....	2
Pawtucket:		Chapman Technical High.....	1
Pawtucket East High.....	33	New Milford:	
Pawtucket West High	21	Canterbury School	1
Sacred Heart School.....	8	Norwich Free Academy.....	1
St. John's Academy.....	1	Poquonnock Bridge:	
St. Raphael High	13	Robert E. Fitch High.....	1
Providence:		Stonington High	9
Academy of the Sacred Heart.....	1	Stratford High	1
Central High	35	Torrington High	1
Classical High	36	Waterbury:	
Hope High	75	Crosby High	1
La Salle Academy.....	49	In the District of Columbia:	
Lincoln School	1	Washington:	
Moses Brown School.....	2	Calvin Coolidge High.....	1
Mount Pleasant High.....	42	In Illinois:	
St. Charles Borromeo.....	1	Chicago:	
St. Dunstan's School.....	1	Austin High	1
St. Mary's Academy.....	2	Cicero:	
St. Patrick's High.....	1	Morton High	1
St. Xavier's High.....	19	In Kansas:	
South Kingstown High.....	43	Iola High	1
Warren High	6	In Louisiana:	
Warwick:		Lafayette High	1
Nelson W. Aldrich High.....	27	In Maine:	
Samuel Gorton High.....	14	Hartland Academy	1
James T. Lockwood High.....	21	Old Town High.....	1
West Barrington:		In Massachusetts:	
St. Andrew's School.....	3	Attleboro High	1
		Bass River:	
		Yarmouth River	1

Boston:		In New Jersey:	
Berkeley Preparatory	1	Dumont High	1
Boston College High.....	1	East Orange High.....	1
Dorchester High	1	Englewood:	
Brookline:		Dwight Morrow High.....	1
Choate School	1	Garfield High	1
Chicopee High	1	Jersey City:	
East Northfield:		Ferris School	1
Northfield School	1	Mountain Lakes High.....	1
Fall River:		Pine Beach:	
B. M. C. Durfee High.....	9	Admiral Farragut Academy.....	2
Falmouth:		Teaneck High	1
Lawrence High	1	Tenafly High	1
Fitchburg High	1	Union City:	
Foxboro High	1	Emerson High	2
Franklin:		Verona:	
Dean Academy	1	Henry B. Whitehorne High.....	1
Holyoke High	1	In New York:	
Leominster High	1	Baldwin High	1
Mansfield High	1	Bronx Vocational School.....	1
Marblehead High	1	Fishers Island High.....	1
Medford High	1	Granville High	1
Melrose High	1	Great Neck High.....	1
Mount Hermon Preparatory School....	2	Jamaica High	1
New Bedford High.....	1	New York City:	
Newtonville:		Eron Preparatory School.....	1
Newton High	2	Haaren High	1
North Adams:		Julia Richman High.....	1
Drury High	1	Oneida High	1
Revere High	1	Rochester:	
Taunton:		West High	1
Msgr. Coyle High.....	1	In Ohio:	
Taunton High	1	Dayton:	
Townsend High	1	Stivers High	1
Wellesley:		Wyoming High	1
Dana Hall	1	In Pennsylvania:	
Worcester:		Gilberton Boro:	
Assumption High	1	Gilberton High	1
In Missouri:		Springfield High	1
Hartville High	1	In Texas:	
In Montana:		Clifton High	1
Billings Senior High.....	1	In Vermont:	
In New Hampshire:		Rochester High	1
Concord:		Saxtons River:	
St. Paul's School.....	1	Vermont Academy	1
Henniker High	1	In Virginia:	
		Fork Union Military Academy.....	1
		King George High.....	1
		<hr/>	
		Total from outside Rhode	
		Island	107

The distribution of veteran and non-veteran students in attendance both semesters, without duplicates, is given in Table 6.

TABLE 6
DISTRIBUTION OF VETERANS AND NON-VETERANS

	Men		Women		Total
	Veteran	Non-Veteran	Veteran	Non-Veteran	
Campus	982	264	14	582	1842
Providence Center	207	74	1	45	327
Bristol Center	51	11	0	3	65
Total	1240	349	15	630	2234

The year closed with a loss of 221 students. The reasons for withdrawal are listed below:

1. Dismissed for low scholastic standing.....	83
2. Voluntarily withdrew because of low grades.....	15
3. Marriage	11
4. Employment	16
5. Poor health	12
6. Needed at home.....	6
7. Financial difficulty	13
8. Transfer to other colleges.....	14
9. Deceased	1
10. Transportation difficulties	2
11. Change of residence.....	4
12. Disciplinary action	4
13. Did not re-register for following semester.....	26
14. United States Service.....	1
15. No reason designated.....	13

221

TABLE 7
STATISTICS OF GRADUATES—1946-1947

	Sept. 13, 1946			Feb. 9, 1947			June 8, 1947			Total for Year
	M	W	Total	M	W	Total	M	W	Total	
Agriculture	1	0	1	6	0	6	4	0	4	11
Business Administration	4	1	5	3	1	4	15	5	20	29
Engineering										
Chemical	0	0	0	2	0	2	2	0	2	4
Civil	0	0	0	3	1	4	5	0	5	9
Electrical	0	0	0	3	1	4	0	0	0	4
Mechanical	0	0	0	11	0	11	21	0	21	32
Home Economics	0	1	1	0	8	8	0	17	17	26
Nursing	0	0	0	0	1	1	0	2	2	3
Science										
Bacteriology	0	0	0	0	0	0	0	1	1	1
Biological Laboratory Technology	0	0	0	0	0	0	0	5	5	5
Biology	0	0	0	3	0	3	1	0	1	4
Botany	0	0	0	0	0	0	2	1	3	3
Chemistry	0	0	0	3	2	5	4	1	5	10
Liberal Studies	0	2	2	0	1	1	1	17	18	21
Mathematics	0	0	0	0	0	0	1	1	2	2
Physical Education	0	0	0	1	0	1	3	0	3	4
Pre-Medicine	0	0	0	1	1	2	2	0	2	4
Teacher Training	0	0	0	0	1	1	1	6	7	8
Zoology	0	0	0	0	0	0	2	2	4	4
Undesignated	0	0	0	0	0	0	2	0	2	2
	5	4	9	36	17	53	66	58	124	186

Of the graduates on September 13, 1946, six students entered from Rhode Island high or preparatory schools, three in September, 1938, one in September, 1940, one in September, 1941, and one in October, 1943; one student came from a school outside Rhode Island, in October, 1943; two students were transferred from other colleges.

Of the graduates on February 9, 1947, 41 students entered from Rhode Island high or preparatory schools, two in September, 1937, seven in September, 1938, five in September, 1939, eight in September, 1940, four in September, 1941, two in February, 1943, ten in September, 1943, and one in February, 1944. Seven students came from schools outside Rhode Island, two in June, 1942, one in September, 1942, and one in October, 1943. Four students were transferred from other colleges, and one was admitted by equivalency examination.

Of the graduates on June 8, 1947, 94 students entered from Rhode Island high or preparatory schools, one in September, 1935, seven in September, 1938, two in September, 1939, 17 in September, 1940, 13 in September, 1941, ten in June, 1942; five in September, 1942, one in February, 1943, two in June, 1943, 29 in October, 1943, four in February, 1944, and three in June, 1944. Sixteen students came from schools outside Rhode Island, two in September, 1938, one in September, 1940, four in September, 1941, one in June, 1942, seven in October, 1943 and one in June, 1944. Fourteen students were transferred from other colleges.

During the year, one graduate student received the degree of Bachelor of Education; three graduate students received the degree of Master of Science, two in Chemistry and one in Economics. At the Commencement held June 8, 1947, one honorary degree was conferred: Doctor of Humanities.

The enrollment in extension courses conducted during the year by the General College Extension Division in various localities about the State numbered 3001 men and 561 women.

In the summer school of 1946, which consisted of two sessions of six weeks each, 750 students were enrolled, 537 men and 213 women.

JOHN C. WELDIN, *Registrar*

The College Library

FOLLOWING is a statistical summary of library activities for the academic year 1946-47:

GROWTH

Volumes added by purchase.....	2,617
Volumes added by gift.....	625
Volumes added by binding.....	1,108
Volumes added by Experiment Station.....	27
Total volumes added during the fiscal year 1946-47.....	4,377
Total volumes withdrawn.....	101

INVENTORY

Volumes in library June 30, 1946, including Experiment Station and Extension Division	83,701
Volumes in Experiment Station and Extension Division, June 1947.....	5,426
Total volumes June 30, 1947.....	88,078
Periodicals received by purchase.....	623
Periodicals received by gift.....	131

USE (CIRCULATION)

Volumes lent for home use (faculty).....	3,555
Volumes lent for home use (student).....	9,616
Overnight reserves	767
Total	13,938
Reserved books lent for use in library.....	10,152
Total reserved book circulation.....	10,919
Volumes placed on reserve.....	1,147
Courses having books on reserve.....	104
Inter-library loans:	
Volumes borrowed from other libraries.....	80
Volumes lent to other libraries.....	12

EXPENDITURES

Salaries, including student assistants.....	\$18,246.42
Travel	350.84
Supplies and equipment.....	3,422.56
Library of Congress printed cards.....	434.11
Binding	2,130.86
Books and periodicals.....	13,435.89
Total	\$38,020.68
Per cent of total institutional budget spent for Library.....	1.9

GIFTS, EXCHANGES AND OUTSTANDING PURCHASES

During the year 1946-47 the Library has received gift material from many individuals and institutions including: Senator Theodore Francis Green, Professor Herbert Palmer, Mrs. Francis P. Allen, Professor L. Guy Brown, Mrs. W. F. B. Leavitt, Mrs. Kenneth Wright, Mr. Arthur Churchill, Professor A. E. Stene, Professor Irwin Tobin, Professor Paul McCorkle, Dean Asa Knowles, Professor Mabel Dickson, Professor Robert Rock-

afellow, Professor Violet Higbee, President Carl R. Woodward, Professor Alan Grinsted, and the Jewish Chautauqua Society.

Our significant purchases have been many. In the field of bibliography we have received the following:

- British Museum Catalogue of Printed Books, 1-58, A-Z, 1881-1900, lithoprint edition.
Halkett, Samuel and Laing, John: Dictionary of anonymous and pseudonymous English literature. Edinburgh, Oliver & Boyd, 1926-1934. 7 volumes.
Hawkins, Reginald: Scientific, medical and technical books published in the U. S., 1930-1944. Washington, National Research Council, 1946.
Pollard, Alfred W. and Redgrave, G. R.: Short-title catalog of books printed in England, Scotland and Ireland, 1475-1640. London, Bibliographical Society, 1946.
Wing, Donald G.: Short title catalog of books printed in England, 1641-1700. New York, The Index Society, 1945, V.I.
Technologisches wörterbuch. New York, Ungar, 1944. 3 volumes.

In the fields of English and history we have filled several gaps by the purchase of the following:

- Baylies, Francis: An historical memoir of the Colony of New Plymouth. Boston, Wiggin and Lunt, 1866. 2 volumes.
Conrad, Joseph: Works. New York, Doubleday, 1924. 24 volumes.
Lowell, Amy: John Keats. Boston, Houghton Mifflin, 1925.
Masson, David: Life of John Milton. New York, Smith, 1946. 7 volumes.
Shelley, Percy B.: Harriet and Mary. London, Golden Cockerel Press, 1944.
Shelley, Percy B.: Shelley at Oxford. London, Golden Cockerel Press, 1944.
Toynbee, Arnold J.: Study of history. Volumes 1-6. New York, Oxford, 1945.

In the natural and physical sciences we have added:

- Baillon, Henri E.: Natural history of plants. London, Reeve, 1871-88. 8 volumes.
Beilstein, Friedrich K.: Handbuch der organische chemie. Zweits engangzungswerk. Springer, 4th ed., 1944.
Blyth, Alexander W.: Poisons, their effects and detection. Wood, 1885.
Egloff, Gustav: Physical constants of hydrocarbons. Volumes 3 and 4. Reinhold, 1946-7.
Frye, Theodore C.: Hepaticae of North America, Univ. of Washington Press, 1937-46. 5 vol., Seattle.
International Congress of Zoology, 10th, Budapest, 1927: Xe Congrès international de zoologie, tenu a Budapest du 4 au 10 Septembre 1927, publié par E. Csiki. Imprimerie Stephaneum, Budapest, 1929. 2 volumes.
Kent, William S.: A manual of the Infusoria. London, D. Bogue, 1880-1882.
Nuttall, George H. F.: Ticks. Cambridge, University Press, 1908. 6 volumes.
Schaefer, Hans: Elektrophysiologie. Wien, Deuticke, 1940.

PREPARATIONS DIVISION

The following sets were completed during the year 1946-47:

- National Tax Association, Bulletin, volumes 1-30, 1916-1945.
Revue Algologique, volumes, 1-7, 1924-1936.
Svensk Botanisk Tidskrift, volumes 1-39, 1907-1945.
Torrey Botanical Club, Bulletin, volumes 1-73, 1870-1946.

Torrey Botanical Club, Memoirs, volumes 1-20, 1889-1943.
 United Nations conference on International Organization, San Francisco, 1945. Documents of the United Nations conference . . . United Nations information organizations, 1945. 16 volumes.
 Penny Magazine (Society for the diffusion of useful knowledge, Boston), volumes 1-8, 1832-1839. American edition of Knight's penny magazine.
 Niles' Weekly Register, containing political, historical, geographical, statistical, economical and biographical documents, essays and facts. Baltimore, 76 volumes, 1811-1849.
 American Midland Naturalist, volumes 15-30, 1934-1943.
 Tropical Woods, pts. 1-92, 1925-47.

The following new titles were added to our subscription list of periodicals beginning January 1, 1947:

Advertising and Selling
 Agricultural Engineering
 American Builder
 American Concrete Institute. Proceedings.
 American Dahlia Society. Bulletin.
 American Dental Association. Journal.
 American Helicopter
 American Lumberman
 American Miller and Processor
 American Notes and Queries
 American Orchid Society. Bulletin.
 Arizona Highways
 Army and Navy Journal
 Army Times
 Art Bulletin
 Athletic Journal
 Automotive and Aviation Industries
 Baby News
 British Grassland Society. Journal.
 Bulletin of Bibliography
 Canadian Florist
 Canadian Homes and Gardens
 Chemical Engineering Progress
 Consumer Education Service
 Economic Botany
 English Historical Review
 Fisheries Research Board of Canada. Journal.
 France Amerique
 Fruit Varieties and Horticultural Digest
 Harvard Library Bulletin
 Heating and Ventilation
 Helminthological Society of Washington. Proceedings
 Human Relations
 Illustrated London News.
 Independent Woman
 International Organization
 Journal of American Folklore
 Journal of Criminal Law and Criminology
 Journal of Pediatrics
 Magazine Intelligence
 Manchester Guardian Weekly

Military Review
 Modern Plastics
 Orchid Review
 Pan Pacific Entomologist
 Prefabricated Homes
 Providence Evening Bulletin
 Scholastic Magazine
 Science Illustrated
 Seed Trade News
 Seed World
 Social Service Review
 Soils and Fertilizers
 South Atlantic Quarterly
 Two to Six
 United Nations Weekly Bulletin
 United Nations World
 U. S. News
 Universities Quarterly
 Washington Post
 Welding Journal
 William and Mary College Quarterly
 Wisconsin Horticulture
 Wood Notes

Miss Briggs reports that 2,468 titles were cataloged during the year, including 478 volumes of gifts. The remaining titles in French literature from the Shippee collection, about 150 in number have been cataloged this year.

Miss Reynolds reports that 193 new titles have been added to the continuations check list. The Yale University School of Forestry has given us approximately 500 items, mostly publications of state departments of forestry. These are in process of being cataloged, and current issues have been requested.

Work has been progressing on our Rhode Island collection. Considerable material dealing with the Kingston Congregational Church, the village of Kingston, and the South County Art Association has been cataloged.

SERVICE TO READERS DIVISION

Miss Elliott reports an increase of 32 percent in the number of volumes lent for home use to students and an increase of 52 percent in the use of reserve books lent for use in the library, despite the fact that we had 234 fewer titles on our reserve shelves during 1946-47 than in the previous year and that books were placed on the reserve shelves for 24 fewer courses. These figures obviously reflect the considerable increase in the college enrollment and general use of all library facilities.

Never before since we moved into our present building has it been necessary to turn students away from the reading room because the seating capacity was taxed to the limit.

The reference and circulation services have both been taxed. An additional library school graduate, Miss Leah Stetson, was added to the staff of the service to readers division in July, 1946. Miss Stetson's duties included the cataloging and arranging of the collection of maps deposited by the U. S. Army Map Service. These maps have been filed in an Art Metal Construction Company plan-file and are arranged according to the Library of Congress map classification. We have purchased the Library of Congress printed cards for maps with the classification printed on the card which means that the major problem is identifying the right map with the right cards. To date more than 5,000 maps have been received comprising over 200 sets of maps, according to the map shelf list cards.

EQUIPMENT

Two fluorescent lighting fixtures have been installed over the circulation desk and the reserve book shelves. In the summer of 1946 an order was placed for a stack elevator. This piece of equipment was the outstanding equipment ordered from the 1946-47 budget. The Beckwith Elevator Company of Boston who have received the order promise delivery by September first. With the installation of the elevator it will be possible to move to the basement a portion of our less used books and periodicals to make room for new accessions.

NEEDS

The needs of our State College Library are not unusual. We could use to great advantage our proper share (5 percent) of the total budget of the college. This amount would double our book appropriation and make it possible to add at least two trained people to our staff.

Our most pressing need is for physical space. Overcrowded stacks, inadequate space for staff, a crowded reading room, no seminar rooms, no space for microfilm reading machines, all

mean that the library is prevented by its cramped quarters from performing its services as well as it would be able to if it were properly housed.

Other quarters should be found as soon as possible for the administrative staff thereby releasing all of Green Hall for library purposes. The strengthening of the academic program would receive a real impetus from the library services made possible by our utilization of this entire building.

F. P. ALLEN, *Librarian and
Professor of Bibliography*

August 30, 1947

The School of Agriculture

TWO new fields of instruction have been added to the curriculum of the School of Agriculture, namely, Agricultural Engineering and Forestry. The former department offers two courses in farm machinery, an introductory and an advanced course in farm shop, and one course each in equipment and structures. The College tractors, motors and equipment, as well as the dairy, poultry and storage structures, are available for study. A well-equipped farm shop is being used as a laboratory and more machinery will be added as funds become available. In addition, field trips are conducted with the help of cooperating farmers and organizations.

The Forestry Department offers courses in general forestry, logging and wood utilization, forest protection, treatment of woodlands and forest mensuration. Emphasis is placed on farm woodlot management, forest fires, wood preservation, and Rhode Island's special forestry problems. Laboratory work is done on the 150 acres of College woodland, and field trips are taken to forested regions of particular interest.

GIFTS AND GRANTS

Special gifts and grants available during the year were as follows:

American Cyanamid Company, New York, for study of the value of Cyanamid in destroying weed seeds in soil.....	\$1,000
Attapulugus Clay Company, Philadelphia, Pennsylvania, for development of diluent and carrier ingredients for insecticidal and fungicidal dusts and powders	5,000
F. A. Bartlett Tree Expert Company, Stamford, Connecticut, for a study of tree therapeutics	750
Bridgeport Brass Company, Bridgeport, Connecticut, for development of aerosol pesticides	6,000
Charles M. Cox Company, Boston, Massachusetts, for mastitis control studies....	1,000
Givaudan-Delawanna, New York, for development of seed disinfectants and fungicidal sprays	2,000
Merck & Company, Rahway, New Jersey, for studies on sulfaquinoxaline to control poultry diseases.....	2,500
Merck & Company, Rahway, New Jersey, for studies of fungistatic, fungicidal and phytocidal properties of certain chemical compounds.....	800
Onyx Oil and Chemical Company, Jersey City, for development of new pesticides and fungicides and their application to agricultural products.....	1,850
Puratized, Incorporated, New York, for development and use of pesticides primarily in the agricultural field.....	1,500

Quartermaster Corps Depot of War Department, Chicago, for study of appetite levels of food consumption.....	6,500
Refrigeration Research Foundation, Berkeley, California, for pre-storage treatment to control apple scald, and work on humidity in apple storage.....	3,500
Rhode Island Fruit Growers, Cranston, Rhode Island, for research in apple storage	500
United States Golf Association, Beltsville, Maryland, for studies on improvement and maintenance of turf.....	450
Total.....	<u>\$33,350</u>

EQUIPMENT

A Fox pick-up cutter with mower bar and windrow pick-up attachments has been purchased for use in making grass silage in the field, and a silo unloader has been bought to reduce the labor in moving ensilage. The Dairy Department now has a Divco truck painted in the College colors, i. e., white with blue trimmings, which adds to the attractiveness of milk delivery to College customers.

The versatile Quonset hut is being used, among other ways, to provide much-needed laboratory space. Such a hut has been made an adjunct of Taft Laboratory and houses research work in entomology and plant pathology, with special emphasis on Dutch elm disease.

The vegetable cellar at East Farm has been completed to the point where general storage is possible and further development is planned. A new vegetable washer has been secured for handling the crops and for class instruction.

The efficiency of the brine cooling system in apple storage has been greatly improved by the addition of a York 3 by 3 compressor.

A new refrigeration system has been installed in the greenhouse to include partial cooling of a newly insulated bulb room. A number of benches at the greenhouse have been adapted for constant water level culture. This and several other methods of reducing labor are being set up for demonstration. Equipment for humidity control has been secured.

A Speed Graflex camera and equipment have been purchased and the Kodachrome slide collection enlarged in the Horticulture Department for the improvement of illustrative material. Additions have been made to the perennial plant collection and most of the trees and perennials grown by the Department have been labeled.

COLLEGE FARM

Fresh vegetables and fruits for use in the College Commons were produced by the Horticulture Department; surpluses were frozen and stored at East Farm. Approximately 2,000 bushels of potatoes were harvested from the Agronomy Department's experimental plots and also supplied to the Commons. About 125 tons of hay and sufficient corn and grass silage to fill three silos were produced; this took care of the entire roughage requirements of the College dairy herd.

DAIRY HERD

The annual report of the Southern Rhode Island Dairy Herd Improvement Association shows that the College herd of 56 cows averaged for the year 8,148 pounds of milk, 356 pounds of fat, and tested 4.37 per cent fat. The average dairy cow in the United States in 1945 produced 4,789 pounds of milk and 190 pounds of fat.

Any cow that is milked twice daily and produces over 400 pounds of butterfat in a year is considered very profitable. The following cows in the College herd produced over 450 pounds of butterfat last year:

<i>Cow</i>	<i>Breed</i>	<i>Lbs. Milk</i>	<i>% Fat</i>	<i>Lbs. Fat</i>
Rhody Colantha Peggie.....	Holstein	16,622	4.0	662
Rhody Colantha Fanny.....	Holstein	16,667	3.5	588
Rhody Colantha Fashion.....	Holstein	14,375	3.8	543
Brightness of R.I.S.C.....	Guernsey	10,364	5.2	536
Rhody Lot. Seg. Betty.....	Holstein	16,637	3.2	534
Rhody Lot. Seg. Lillian.....	Holstein	14,072	3.6	511
Rhody's Anna	Holstein	13,775	3.6	500
Rhody's Angeline	Ayrshire	13,160	3.7	491
Roberta of R.I.S.C.....	Guernsey	9,589	5.0	482
Countess of R.I.S.C.....	Jersey	8,688	5.5	481
Rhody's Topaz	Guernsey	8,787	5.4	476
Rhody's Sunset	Jersey	8,166	5.7	465
Goldrop of R.I.S.C.....	Guernsey	9,420	4.9	459
R.I.S.C. Duchess	Jersey	8,908	5.1	450

Artificial insemination was reestablished in November and is being maintained temporarily by the College on a demonstration basis. Semen from all breeds of cattle in the College herd has been made available throughout the State.

The College-owned senior yearling heifer, Mark Hanna's Jenny, was placed second in her class and was made reserve grand champion of the Eighth Annual Spring Show of the

Rhode Island Ayrshire Club. The event was held May 3 at the Lippitt Farm in Hope.

The Jersey herd was classified for the first time and received an average score of 84.69. The Holstein herd was scored 80.0, upon reclassification. For comparison, the average dairy cow would score approximately 75 points on the basis of type and conformation.

RHODE ISLAND EGG LAYING CONTEST

Eleven states and one foreign country sent entries to the sixteenth contest. Rhode Island Red hens continued to give better production records than all other breeds or varieties entered. Average egg production of Reds was 220.85 eggs, totaling 235.18 points. This was substantially above the contest average for all birds entered, which in the final records stood at 214.23 eggs and 226.72 points.

Improved livability of birds entered in the contest, so noticeable in recent years, continued throughout the sixteenth test. The total mortality of 13.78 per cent was relatively low for contest competition, and is much lower than the total reduction sustained in commercial flocks throughout the country. Less difference in mortality was noted between New England and non-New England entries than has previously been the case. The mortality of hens originating in New England was 11.68 per cent, and for those outside this area 15.75 per cent.

DIAGNOSTIC SERVICE

Poultrymen throughout the State continued to take advantage of the diagnostic service offered by the College. During the year 167 farms submitted a total of 788 specimens for diagnosis on 218 different occasions. The number of specimens was above that of a year ago but the number of farms and submissions was less than in 1945. One contributing factor was the heavy reduction in laying flocks and broilers started, due to the acute feed shortage which existed during part of the year.

The most important diseases encountered in semi-mature and adult stock were leucosis, coccidiosis and the respiratory diseases. Four known cases of Newcastle disease were identified during the year, and considerable laboratory work was done on

a method to differentiate between Newcastle and bronchitis. The most common diseases in young chicks submitted to the laboratory for examination included coccidiosis, vitamin deficiencies and pullorum. Turkey diseases met most frequently were blackhead, coccidiosis and pullorum. For the first time some evidence of salt injury was found in turkey poults.

FEED AND FERTILIZER CONTROL SERVICE

In cooperation with the Rhode Island Department of Agriculture and Conservation, members of the Department of Agricultural Chemistry made analyses of 437 samples of commercial feeds and 144 samples of fertilizers and liming materials. These analyses and other technical services are necessary to verify guarantees of quality required by State laws governing the sale of these commodities. The number of samples was greater than that for the previous year but less than in pre-war years. Results of the inspection are published in the Annual Feed and Fertilizer Bulletin.

SOIL ANALYSES

This service for farmers, market gardeners, managers of golf courses, cemeteries and parks and for home owners has grown from a few samples ten years ago to 1,400 analyses made during 1946. The samples are taken by the owner and sent to the Extension Agronomist or County Agent. Analyses made by the Department of Agricultural Chemistry are used by the specialists of the Agricultural Extension Service in making recommendations concerning fertilization of farm crops, lawns, shrubbery and ornamentals.

MEETINGS

The following agricultural events were held at the College: Separate field days at East Farm were held by the Rhode Island Poultry Producers' Association and the Rhode Island Turkey Growers' Association to study the research work being conducted and to attend educational programs which included talks by outstanding speakers. The Poultry Plant was visited by numerous groups other than poultrymen.

Vocational agriculture students from Rhode Island high schools met on campus May 7 for contests in dairy cattle judg-

ing, egg and poultry judging and fruit tree grafting. In the afternoon the group visited the dairy farm and the agronomy experimental plots where demonstrations and explanations were given of the work in progress.

On May 13 members of the various 4-H Club Committees met to discuss questions of policy and make plans for the summer camp and 4-H Club awards.

June 21-27 were the dates of the 4-H Club Camp in 1947. There were daily programs of instruction, demonstrations and exhibits of projects, as well as recreational events such as swimming and music, and vesper services in the evening.

A two-day conference was held in June by the New England Feedmen to discuss mutual problems and needs of feed dealers and consumers.

The New England Cemetery Association held a field day on June 27, when the turf experiments were inspected and discussed. In the afternoon a panel discussion of ornamental plant problems took place in the horticulture greenhouse.

Representatives of the Regional Pasture Research Laboratory at State College, Pennsylvania, visited the campus the last three days in June. The Rhode Island Station is cooperating with the Laboratory in studies in pasture renovation and strain testing; the work was presented and discussed and plans made for continuing the experiments.

The Rhode Island Potato Growers' Association met in July to see the experiments on new potato varieties, fertilizers, spraying and dusting. Several new varieties are being grown and materials for insect and disease control are being tested.

The Rhode Island Fruit Growers' Association met at East Farm on August 15, when the experimental work on fruit production and storage was reviewed.

In September the Greenkeepers' Association spent a day studying the various experiments in turf culture; Rhode Island's scientific work with fine lawn grasses is nationally known.

EXTRA-CURRICULAR ACTIVITIES

The College performed the following services, in cooperation with the Agricultural Experiment Station and the Extension Service in Agriculture and Home Economics:

The Rhode Island Agricultural Conference, State Department of Agriculture and Conservation and the Rhode Island State College sponsored the Southern New England Farm and Home Show and agricultural meetings at Providence, February 25-March 1. Several booths at the Farm Show exhibited various phases of the work carried on by the College.

Five lectures on the relation of economics to daily living were given by members of the Agricultural Economics Department to a class of 40 adults in Newport; these lectures were held in cooperation with the Newport Board of Education, the State Department of Education, and a committee of Newport citizens. In the course of the year the Agricultural Economics Department also prepared farm production data at the request of the State Department of Agriculture, the American Farm Bureau Federation, several manufacturers and other organizations, both public and private.

Activities of Dr. L. Guy Brown of the Sociology Department included:

1. Working on the manuscript of a college textbook in Sociology.
2. Writing a chapter for a book on marriage which will be published in collaboration with other authors.
3. Reviewing six books for the *American Journal of Sociology* and *The Annals of the American Academy of Political and Social Science*.
4. Writing a section on Social Pathology for *Collier's Encyclopedia*.
5. Serving on the Committee of the Mayor of Providence for revamping the census tracts.

Many staff members were called upon to present papers at meetings of professional societies and represented the College at conferences on various problems relating to agriculture.

MASON H. CAMPBELL, *Dean*

The School of Home Economics

THE enrollment in the School of Home Economics continued to increase during the past year, even though the 1946 Freshman class was limited to the same number admitted the previous year. The increase was due to a decline in the number of students withdrawing before completing their college course and, in part, to transfers from other institutions.

RESIDENT TEACHING

Some new courses were introduced during the past year, and the staff has continued to revise course content in line with the educational philosophy of the School which aims to provide a core of general education in Home Economics as well as in the physical, social, and biological sciences.

Because of the increased demand for opportunity to pursue graduate study, graduate courses are now offered in Child Development and Family Relations and in Foods and Nutrition.

Members of the staff conducted evening courses in food economics and clothing construction for the wives of veteran students.

The operation of the Kingston Inn by the college provided additional laboratory experience for students majoring in Institution Management.

NURSERY SCHOOL

Because of the large number of applicants for admission to the Nursery School, including the children of married students, the School extended its service to include afternoon play schools for children who could not be admitted to the regular morning school. Play schools were provided for twenty-eight children at Watson House and for seven children at Fort Kearney. In this way the space and equipment were put into service for more young children, and also provided observation and participation experiences for more students registered in Child Development courses.

RESEARCH

Cooperative projects with the Bureau of Human Nutrition and Home Economics, United States Department of Agriculture, and with the Office of the Quartermaster General, United States

Army, started in 1945, were continued during the year. These projects were in addition to the research in nutrition and home management conducted by the Home Economics research staff through the Agricultural Experiment Station.

GENERAL COLLEGE EXTENSION

Demands of the resident teaching program have seriously interfered with offering Home Economics courses in the Division of General College Extension. There is urgent need to develop this program.

Requests for Extension courses of graduate level by teachers of Home Economics, as well as for undergraduate courses in Child Development, Family Relations, and Nutrition, are increasing.

SUMMER SCHOOL

The first summer school offerings of graduate level were given during the 1946 Summer Session. Workshops in Child Development and Family Relations, and in Home Economics Education, were attended by teachers and other professional workers in Home Economics.

The Summer Art Workshop, started in 1944, had an enrollment of sixty-five persons for one or more weeks in the 1946 Summer Session.

PHYSICAL PLANT AND EQUIPMENT

New equipment, including sewing machines, textile testing apparatus, microscopes, stoves, and refrigerators was purchased during the year. Needed repairs were also made in Watson House, so that all of the space in the house is now available for use by the Nursery School.

PROFESSIONAL ACTIVITIES

Members of the faculty gave generously of their time to the work of professional organizations. Individuals served as: President of the Rhode Island Home Economics Association; Secretary of the American Home Economics Association; Chairman of the Art Division of the American Home Economics Association; on the Executive Board of the New England As-

sociation for Nursery Education; as well as committee chairmen in the Rhode Island Home Economics Association and in the Rhode Island Dietetic Association.

STUDENT ACTIVITIES

The Home Economics Club is affiliated with the College Club Department of the American Home Economics Association. Officers of the Club attended the annual Workshop for New England College Home Economics Clubs. The club also sent a delegate to the National Meeting of the College Club Department of the American Home Economics Association held in St. Louis in June.

NURSING EDUCATION

Thirty-two students were enrolled in the five-year Nursing program this past year. The first group, after completing two years of study on the campus, is now enrolled in clinical training at the Roger Williams General Hospital in Providence. A second group of ten students entered the pre-clinical training in the hospital in June, 1947.

A full-time director has been appointed to supervise the program, both on the campus and in the hospital.

Two courses in Public Health Nursing were offered for the first time this year in the Division of General College Extension.

OLGA P. BRUCHER, *Dean*

The School of Engineering

THE School of Engineering, with the close of the year 1946-47, has almost completed the transition from the restricted and accelerated program of the wartime period to the regular prewar program. Only one more class will be graduated at mid-year, and many activities such as the student engineering societies and plant inspection trips, which were suspended temporarily, resumed operations this year.

A new student chapter of the Institute of Aeronautical Sciences was installed by Dr. Igor Sikorsky. This is to be the professional society for the students enrolled in the Aeronautics Option in Mechanical Engineering.

NEW CURRICULUM

A new curriculum in Industrial Engineering was approved by the faculty in September, 1947. The purpose of this curriculum is to train men who are interested in the managerial and production phases of industry. This program of studies gives the student the usual basic scientific and engineering background and aims to develop the attitude of precise and accurate thinking. The work in economics and business administration emphasizes the industrial management phases of the program and is given by the School of Business Administration.

The course in Time and Motion Study which appears in this curriculum was formerly handled by that school also, but has now been turned over to the Mechanical Engineering Department.

NEW MACHINE TOOL LABORATORY

The College was fortunate in acquiring from navy surplus property a steel-frame warehouse-type building 40 by 90 feet, for use as a machine tool laboratory. The building was moved from the Sun Valley Camp and erected on a site north of Bliss Hall by the Federal Works Administration.

The building now houses the machine tools formerly located in Bliss Hall and in addition many more machines acquired as surplus property. This new laboratory makes a valuable addition to the facilities of the Mechanical Engineer-

ing Department. It provides more up-to-date equipment and more working space around the machines, and frees badly needed space in Bliss Hall for other purposes. The only drawback has been the lack of electric power for the operation of the machines, because of the unavailability of transformers. However, it is expected that the laboratory will be in operation by September, 1947.

TEMPORARY PHYSICS LABORATORY

Because of the great increase in enrollment in physics courses, additional laboratory space for the Physics Department had to be found. The answer was provided in the acquisition of a temporary wooden structure from navy surplus, also from Sun Valley. This building, which was erected on the vacant space to the rear of Washburn Hall, has served very well to handle the elementary physics laboratory. The space in Ranger Hall occupied by the Physics Department was remodeled to accommodate the more advanced courses. A darkroom for optical experiments, a photographic darkroom and a laboratory for advanced experiments in mechanics were provided.

WAR SURPLUS PROPERTY

In addition to the buildings mentioned above, the School of Engineering received much valuable equipment from army and navy surplus. The Mechanical Engineering Department was allotted several drawing tables and the Electrical Engineering Department received numerous electronic devices. All departments received some office furniture.

ACTIVITIES OF THE STAFF

The textbook "Engineering Trigonometry" by Pease and Wadsworth was published and used in the freshman engineering classes this year. The manuscript for a second book has been completed also by Dr. Pease with the assistance of his colleagues in the Mathematics Department. Dr. Bender completed the manuscript for a textbook on "College Algebra."

Professor Stubbs made corrections in his textbook on "Estimates and Cost of Construction" for a second printing.

He also wrote an article on "Foundations" for a Mechanical Engineering Handbook.

Mr. Jerry Gentile completed preparation of an "Engineering Materials Testing Laboratory Manual," to be used beginning with the Fall term.

Professor Schock and Dr. Stuart with assistance from Professor Brown completed a booklet of "Descriptive Geometry Problems," which will be ready for use in September.

Dr. Albright's textbook on "General Physics" is in the hands of the Ronald Press Company, and has been promised for the Fall term. Also, his laboratory manual has been enlarged and revised. Dr. McCorkle completed the manuscript for a textbook on "Electronics."

The writer's "Laboratory Manual for Analysis of Coal, Gas, Water and Petroleum Products" was expanded and revised this year. The writer gave a paper on "The Pro's and Con's of the Five-Year Curriculum in Chemical Engineering" at the annual meeting of the New England section of the American Society for Engineering Education, held at Norwich University, Northfield, Vermont.

Professor Wesley B. Hall, Head of the Electrical Engineering Department, returned to his duties at the College, after having been in active service in the U. S. Naval Reserve.

All departments were represented at various local and national professional meetings.

EVENING EXTENSION COURSES

Evening extension courses were given by faculty members representing all of the departments in the School of Engineering.

ENGINEERING EXPERIMENT STATION

On November 15, 1946, the Engineering Experiment Station was admitted as a member of the Engineering College Research Council of the American Society for Engineering Education. This organization has for its purpose "to assist in developing research facilities of engineering colleges . . . to further advanced study . . . to develop and coordinate industrial and scientific research . . . to cooperate with other associations

and government agencies in the prosecution and promotion of research . . . and to publish periodic reports, studies, papers and investigations of significant value to engineering colleges and cooperating research agencies."

Work is still continuing, in cooperation with the U. S. Bureau of Mines, on the Rhode Island coal project. A small addition has been made to the original research building to permit the installation of additional auxiliary equipment for further studies.

The initial research work on the loom project has been completed and a full-scale model is now being constructed.

URGENT NEEDS

Although some space has been made available in Bliss Hall for expansion of the various departments, the building is still badly crowded. The space vacated by the shops is being converted entirely into laboratories, but even this falls far short of meeting the needs. Because of the greatly increased enrollment in Electrical Engineering and the acquisition of much valuable electronic equipment, the Department feels the need for space badly. Temporarily, this need will be partially met by the use of Quonset huts.

Also, in connection with the curriculum in Industrial Engineering, a laboratory should be set up to supplement the lecture work in motion and time study.

Offices in Bliss Hall are too crowded for effective work, and particularly department heads have no privacy for talking over staff problems.

Space for research is inadequate because all available laboratory space is in use for undergraduates. Yet today, research in engineering is gaining at a rapid pace in most institutions. If we are to encourage this activity among our faculty members, we should provide the facilities.

All of this points to the need of an additional building for engineering, if the school is to move forward, keep abreast with other institutions and develop a well-rounded program of instruction and research.

T. STEPHEN CRAWFORD, *Dean*

The School of Science

THE academic year recently terminated has been one of unprecedented activity for the School of Science. The skyrocketing of enrollments, the procurement of additional staff members, the decision to supplement campus registration with Centers in Providence and Bristol, the procurement of adequate classroom facilities and equipment are some of the factors that bespeak the extent and variety of activities that have confronted every department of the School. Service has been the keystone in the arch of academic endeavor during the year. Everyone has been anxious to have a part in shaping the keystone and making certain that it gave lasting strength to the arch and all who passed through it.

The veteran has been in the majority in nearly every classroom of this School. He has frequently been impatient with his academic progress. This means that an eagerness and an earnestness have characterized the work of the great majority of the veterans. Failures have been at an all time low and the tempo of work has been at an all time high. We would hope that this situation might continue indefinitely.

STAFF CHANGES

Changes in the personnel of the teaching staff have continued to be numerous. Two factors contribute especially to this, first, the readjustments that many individuals are making in a return from extended military service to civilian life, and, secondly, the rapid increase in enrollments, which require substantial additions to staff.

One has returned from military leave. One who resigned to enter military service has been reappointed. Two on military leave, including one department head, have resigned. Four others, including one department head, have resigned to accept more attractive offers in other institutions. Twenty-two new members, including one department head, have been appointed. Six additional part time appointments have been made. These represent increases in staff in seven departments. Several appointments were necessitated by the establishment of the

Providence and Bristol centers. A list of staff changes is given on pages 95-102.

TEACHING PROGRAM

The admission of a very large freshman class and the establishment of centers in Providence and Bristol have created many problems for the teaching faculty. Additional sections in many courses have been required. Changes in teaching assignments have been numerous. A number of staff members have had to divide their time between the campus and the centers.

The entire staff has shown a keen interest in rendering the greatest possible service to returning veterans, many of whom have been away three years, others four years, some longer. Individual problems have been many. A sympathetic and willing faculty has handled these with efficiency and satisfaction. The veteran has brought an increased maturity, a wider experience and a broader vision to the classrooms, which has been stimulating to staff and students alike.

One direct result of this has been to cause the faculty to review critically the course offerings in the light of new demands placed upon them. Rather extensive revision and additions have occurred in the courses of the departments of English, History and Political Science, and Modern Languages. The curriculum in Biology Laboratory Technology has been extended to provide an option in Botanical Technique. Considerable interest has been expressed in a pre-law curriculum and a committee of the faculty is to be appointed to study its feasibility.

RESEARCH ACTIVITIES

The pressure of teaching assignments, committee work and administrative duties has left but little time or opportunity for the research activities of the staff. We dislike to think of teaching and research as placing competitive demands on an instructor's time and interest; however, it is our observation that the conscientious instructor will always meet his teaching and other scheduled duties even though he has to forego his research to do so. It is hoped that the inclusion of an item for

research in the budget of the school for the coming fiscal year will not only provide encouragement to members of the staff but will also provide them with material, equipment and other assistance in the pursuit of their research problems.

A list of projects and by whom carried on or directed is as follows:

Bacteriology

Dr. Philip L. Carpenter has directed the work of Mrs. Frances C. Bessette, a graduate student, in some preliminary studies leading toward quantitative determination of antibodies specific for the various antigenic fractions of certain *Shigella* strains.

Botany

1. Dr. Vernon I. Cheadle.

Continuation of research on Monocot bundles; both slide making and analysis of date.

2. Dr. Frank L. Howard.

Three quarters of his time is devoted to conducting and directing the research in Plant Pathology and Entomology in the Rhode Island Agricultural Experiment Station. Major projects include at present:

- a. Fungicide and insecticide development
- b. Aerosols
- c. Mist sprays
- d. Dust diluents
- e. Chemotherapy for control of vascular plant diseases.

3. Dr. Elmer A. Palmatier.

- a. Direction of graduate studies on "The Bryophytes of Southern Rhode Island."
- b. Supervision under a grant-in-aid of Bryophytes.

Chemistry

Under the direction of Dr. W. George Parks, the following research and development contracts are now active:

U. S. Industrial Chemicals, Inc.
National Academy of Sciences.

In addition, research and development work has been carried on for various industries. The list of industries aided is extensive. The work has involved mildew-proofing, preparation of special chemicals, and special analyses of various types.

During the year the Alrose Chemical Company has established a fellowship in the department.

Two full-time research workers have been employed on the various contracts and five graduate students are carrying on research for the thesis to be submitted for the Master's degree.

Education and Psychology

Cooperating with Professor Mabel E. Dickson of the School of Business Administration, Dr. Frank M. Pelton has supervised an analytical study of the academic grades of this year's Freshmen as compared with results on the various examinations used as part of the admission's program.

English

In addition to publishing the articles listed on page 104 Dr. Paul E. Reynolds is at work on an anthology of Victorian lyric poetry.

Dr. Walter L. Simmons presented an article "A Conservative Reviews the Masterpieces of His Time: Sir John Hawkins" before the regional meeting of the Modern Language Association held at the University of Akron.

Dr. Lee C. Wilson is working on three texts: World Literature, Sonnets and Poems of Shakespeare, and Selections of Spenser's Poetry.

History and Political Science

Dr. Daniel H. Thomas, as Editor of the "History" Section of a Penguin volume to be entitled *What To Read*, did the research necessary for this section. He also revised his section of "History" for the tenth edition of *Good Reading*.

Dr. William A. Itter, Dr. William D. Metz and Mr. John O. Stitely are starting research in state and local government, which may develop into a departmental project of unusual merit.

Modern Languages

Dr. Lucille P. Itter is working on the translation of *Die Schwartz Spinne* by Jeremias Gotthelf.

Music

Professor Lee C. McCauley has conducted an investigation in pedagogy, studying the learning processes of class method teaching in the field of applied music.

Zoology

The research work of the department was confined to the activities of the Narragansett Marine Laboratory.

PHYSICAL IMPROVEMENTS

Considerable progress has been made in effecting many long-delayed repairs, replacements and additions in the various departments.

A summary of improvements by departments follows:

Bacteriology

Two constant temperature rooms have been built for use as incubators. These have greatly relieved the serious shortage of incubator space for class use. The new construction required the sacrifice of part of the entry hall and part of an office, but it also permitted the construction of a corridor making possible direct entrance to the classroom.

Botany

One Beckman pH meter (Industrial Model) and one autoclave have been replaced by five new Bausch & Lomb laboratory microscopes. Because of long range planning in effect for many years, the microscope replacement program is nearing the point where the older instruments can be replaced at the end of twenty years of service. About sixty microscope slides, chiefly of woods, were purchased for the course in plant anatomy.

Department of Education and Psychology

Two instructional films, one on the nervous system and one on heredity, were purchased and are available for use in other departments of the college.

English

Three additional offices in South Hall have been acquired, together with the necessary furniture, to house nine members of the staff.

History and Political Science

Additional office equipment has been secured and several important books have been added to the reference collection of the department.

Modern Languages

Four wall maps have been purchased to facilitate teaching in some of the advanced courses.

Music

Repairs have been effected on instruments for the orchestra and band, and one Harrison grand piano has been rebuilt.

Office equipment, including two filing cabinets for music, has been acquired.

One flute and one viola have been purchased.

The Department of Music has added considerably to its library of recorded music and to its library of music for choir, band and orchestra.

Physical Education for Men

Two 40' x 100' Quonset huts have been placed end to end to provide an auxiliary gymnasium 40 x 200 feet. With dirt floor, side windows, insulated walls and unit heaters, the building permits of extensive use for physical education classes and track practice for such events as high jump, pole vault, broad jump, shot put, and starting for running events and hurdles. Two 16' x 36' Nissen huts provide a classroom and an arena for boxing and wrestling. These facilities are a welcome relief to the much over-crowded Rodman Hall and will serve the department during the interim required for the construction of more permanent and more adequate structures.

The problem of storage of equipment necessary to the maintenance of our Physical Education Department is acute and requires a large building to replace the old dairy barn already scheduled to be razed.

Physical Education for Women

A small field house for equipment has been erected near the girls' athletic field. Various gymnasium and office equipment, including files for keeping student records, has been added.

Zoology

A part of Room 206 has been partitioned off to create an office. Several wooden filing cabinets and storage cabinets have been received from war surplus. A number of items of laboratory equipment, including two medical microscopes, sixty laboratory table lamps, four stop watches, one electric hotplate, one electric pH meter, ten student paraffin ovens, have been added. Several items of instructional material, including Kodachrome slides, microscope slides, and skeletons were purchased.

PROFESSIONAL IMPROVEMENT

The informal biology seminar, consisting of staff members in the departments of Bacteriology, Botany and Zoology, has

continued to meet weekly during the noon hour. Other departmental groups, including Education and Psychology, History and Political Science, meet frequently in an informal afternoon coffee hour and discuss problems of current interest.

The extra-college professional activities of some members of the staff are worthy of note.

Bacteriology

Dr. Philip L. Carpenter assisted in the examination and rating of candidates for State Civil Service appointments in the Connecticut Public Health Laboratories at Hartford, Connecticut, on June 6, 1947.

Botany

Dr. Vernon I. Cheadle is serving as Chairman of the Membership Committee of the Botanical Society of America, and as an Abstractor for *Biological Abstracts*.

Dr. Frank L. Howard is an Associate Editor of *Phytopathology*.

Chemistry

Dr. W. George Parks is Director, Committee on Quartermaster Problems, National Research Council.

He also is serving as Director, Chemical Research Conferences, A.A.A.S. for 1947.

Director of the Providence Engineering Society and Councillor (National) Rhode Island Section of the American Chemical Society.

Dr. R. K. Carleton served as visiting Professor of Chemistry at Shurtleff College, Alton, Illinois, Summer, 1946.

Dr. Eugene C. Winslow served as Visiting Instructor in Chemistry, Rhode Island College of Pharmacy and Allied Sciences, 1946-47.

Physical Education for Men

Professor Frank W. Keaney—Invitation lecturer—basketball clinics held in the Boston Garden—November 29 and 30, 1946, and by the Basketball Coaches of America, New York City, March 20-27, 1947.

Professor Frederick D. Tootell—Invitation lecturer, New Jersey High School Clinic, March 21-22, 1947, and Rhode Island High School Clinic, March 28, 1947. Secretary, American Track Coaches Association.

Professor Paul F. Cicurzo, Jr.—President, Athletic Officials' Association of Rhode Island.

Physical Education for Women

Miss Dorothy M. Massey served as a member of the Providence Board of Athletic Officials.

Zoology

Professor Robert A. DeWolf—Member of Committee of State Planning Board charged with study of "Abatement of Pollution of Rhode Island Waters."

Member of Technical Advisory Committee of the Atlantic States Fisheries Commission.

Dr. Herbert C. Knutson—Member Board of Directors, Rhode Island Wildlife Federation.

The extra-curricular activities of the staff on the campus and in the community have been varied and extensive and reflect a high degree of academic, social and civic responsibility.

NOTEWORTHY EVENTS AND ACCOMPLISHMENTS

1. The Department of English has again sponsored the High School Model Congress and the College Model Congress.

We are of the opinion that the educational worth of these events is very considerable. They bring young men and young women together in democratic association to present and discuss questions of state and national interest and importance. We believe, however, that neither event has reached its potentialities of interest or of service. In origin and in the tradition of operation, these congresses have been laboratories in public speaking and of action under parliamentary procedure. Without detracting from these important phases of training for citizenship, we believe that the educational experiences of the participants would be enhanced by greater emphasis upon the subject matter areas involved in the bills presented. Our proposal would be to place the congresses under the joint sponsorship of the Departments of English, History and Political Science, and Education and Psychology with the college administration collaborating in matters of public relations.

2. The Department of Music sponsored a third Rhode Island State College "Music Series" with the following concerts:

Vivian Della Chiesa—Soprano—November 12, 1946
Leo Smit—Pianist—January 21, 1947
Griller Quartet—March 4, 1947
Ezio Pinza—Basso—March 21, 1947.

The patronage of the college and of the public exhausted the capacity of Edwards Auditorium and furnished further proof of the general approval of this contribution to the cultural life of the community.

3. The Summer Music Camp for High School Students was held from July 1 to August 11, 1946, with 102 enrolled from the six New England States and New York, New Jersey and Pennsylvania. A special faculty of six, from as many states, assisted Professor McCauley in the Camp.

An All-American Music Festival was held as the concluding highlight of the Music Camp.

Viewed in its larger aspects, the Music Camp is both unique and outstanding; in its fundamental objective — the training of Rhode Island youth — the Music Camp has fallen far short of our hopes and expectations. Too few of our Rhode Island high school students attend, and the ratio of out-of-state students is far too large. We believe that the concept of a summer music camp is excellent. Such a camp at the State College should aim to serve the music teachers and the youth of Rhode Island. We suggest that we review our experiences with the music camp, with service to the state as the primary objective before us, and unless ways and means can be developed for the greater realization of this objective, we recommend the discontinuance of the camp.

4. Our sports program for men has included for the first time since the war the four major sports of football, basketball, baseball and track. Student interest in tennis has been high, and in response to popular demand a varsity coach has been appointed. With increased numbers of students and with a high percentage of veteran students, the need and the demand for a more extensive intra-mural sports program have developed. Such a program requires careful direction and administration, if it is to serve fully the needs of the vast majority of students who never gain membership on a varsity squad.

5. Our Department of Physical Education for Women served as host to the physical education departments of several neighboring colleges and staged a series of games with the emphasis on the fellowship and sportsmanship of play rather than on the victory. Another most successful May Day program was held.

6. During August, 1946, the college served as joint host with Brown University to the Society for the Study of Growth and Development. All the meetings and all the visiting scientists were housed on the campus. These meetings brought many distinguished visitors to our campus and gave to a considerable number of our staff an opportunity to attend the several sessions. Furthermore, it gave the staff of our biology

departments an opportunity to work with staff members of Brown University in planning the arrangements and effecting the success of the conference. We hope that other opportunities involving other departments will present themselves for joint and cooperative endeavor between the two institutions in the future, and that "Growth and Development" will again come to all concerned.

NARRAGANSETT MARINE LABORATORY

The work of the Narragansett Marine Laboratory has been limited during the year. In September, 1946, Dr. Charles J. Fish, who had served as Director of the Laboratory from its beginning, and who had been on leave for military service during the past four years, resigned. He has continued to serve on a part-time basis as Consultant in Marine Biology.

In addition to Professor Robert A. DeWolf, who has served as Acting Director, two part-time workers have served the Laboratory during the year. Mr. Morgan Worthy has organized some of the data collected in the otter trawlings, to sample population of fish at specific localities at various times to obtain information pertinent to migration studies, and to supplement present knowledge on growth of various species. Mr. Robert E. Sutcliffe has assisted in the continuation of the seining program, which began in the summer of 1937.

In April, 1947, Dr. Fish submitted a report on The Conservation of Marine Resources in Rhode Island, and outlined the work of the Narragansett Marine Laboratory during the ten years of his directorship. In this report he recommends that (1) the basic policy of the laboratory and the scope of its work remain unchanged, and (2) that cooperation with State and Federal fisheries agencies and with other marine laboratories in southern New England continue to be encouraged.

Dr. Fish points out that two major needs which have been recognized since the inception of the laboratory remain unfulfilled. These are (1) participation by all pertinent departments of the college in the program of the laboratory, and (2) a year-round field program. These needs have become increasingly apparent during the operation of the laboratory,

and in the re-organization under a new director we hope they will come into prompt fulfillment.

GENERAL OUTLOOK

The great upward surge of enrollments in September, 1946, created immediate problems for many departments. With time, these same enrollments will create other problems in the upper-classes. Space requirements of a temporary nature have been provided, but replacements of a permanent and more satisfactory quality must be secured.

The need for a new building for physics and chemistry, as emphasized in our last report, was made the subject of a special request in the last General Assembly. An appropriation of \$750,000 unanimously voted by both House and Senate received referendum approval in June. Plans for the new building and its construction should be expedited as much as possible and occupancy effected at the earliest date.

The accreditation of our Department of Chemistry will be raised with the American Chemical Society as soon as the date of occupancy of our new building has been established.

The need of the new gymnasium emphasized in our last report is all the more apparent, and we hope will receive consideration by our State legislature in its 1948 session. Contrary to public opinion, the need of a new gymnasium is not occasioned by or with the intent to satisfy the box-office demands resulting from the phenomenal success of our basketball teams. Rather does it result from the basic needs for better instructional facilities in our teacher training program in Physical Education, and for improved facilities for military training. As a Land-Grant college receiving federal aid, we are obligated to offer military instruction. The instruction and the required military equipment are supplied by the Army. Classrooms, offices and space for the storage of equipment are the responsibility of the college. Not many of our faculty may realize — to say nothing of the general public — that the college now has in its custody an inventory of sixty-five thousand dollars in military property required for the training of our infantry unit. With consideration of the college by the Army for the training

of a Transportation Corps and a Quartermaster's Corps, the amount of equipment to be placed here may be substantially increased. The college urgently needs a combination gymnasium and armory, if it is to fulfill its obligations to the state and to the nation.

The question of the A.B. degree continues to be uppermost in the minds of parents and students alike. With the popularity of the Liberal Studies Curriculum exceeding all others within the School, it is apparent that the request for the Arts degree will undergo no abatement. Likewise, with graduates in English, history, modern languages and economics going to other institutions for further study, they may experience some handicap by the lack of the baccalaureate arts degree. We again recommend that our Board of Trustees be requested to give the matter of the arts degree further study and consideration.

In conclusion, I should like to pay tribute to the high quality of service given by the staff of the School during the year. It has been a difficult year for everyone. For a number, it has been the year following an extended absence from the classroom, and personal readjustments have been many and often difficult. Living accommodations have often been inadequate and in some instances have required extended travel. Faculty and students alike have been intent upon the job at hand. We have made substantial academic progress and gained in academic stature. We come to the close of the year with a feeling of mental and physical exhaustion, but with pride in our realization of accomplishment.

HAROLD W. BROWNING, *Dean*

School of Business Administration

AN indication of the magnitude of change in student enrollment may be found in the fact that the number of students enrolled in the School of Business Administration during the past year exceeded the total college enrollment in the year 1943. There were 559 students enrolled during the past year which represents an increase of approximately 213 per cent over the average yearly enrollment of the year July 1, 1945 to June 30, 1946. The increased enrollment was not limited in its effect, but was distributed over all curricula in the School of Business Administration.

DEPARTMENTALIZATION OF THE SCHOOL

At the close of the academic year four departments were formed and department heads appointed in order to cope with the problems arising from the large enrollment increase in the various curricula. The four departments and their heads are:

Accounting and Business Law.....	Dr. W. S. Briggs
Economics.....	Prof. R. Rockafellow
Industrial Management.....	Prof. M. E. Dickson
Marketing and Advertising.....	Prof. H. H. Palmer (Acting)

Departmentalization will facilitate revision and development of courses in the various curricula in accordance with current needs in the State of Rhode Island.

PHYSICAL FACILITIES

Increased and improved facilities are needed by the School of Business Administration if effective instruction is to be offered to the students in the school. Available office space for faculty members has been severely taxed with the increase in the size of the staff. Five or six members are crowded into space which should be utilized by only one person if the best interests of the teacher are to be served. The problem of laboratory space for accounting, statistics, and office practice courses is acute. Some alleviation will be found by using the basement of East Hall, but this location is not the most desirable place either for teachers or for equipment.

PROFESSIONAL IMPROVEMENT

Members of the faculty have taken part in professional meetings, both local and national. Some members have contributed to periodicals in their respective fields of study.

In conclusion I wish to acknowledge with appreciation the splendid help and cooperation which I have received from faculty members, individually and collectively, during the past year when I served as Acting Dean.

GEORGE A. BALLENTINE, *Dean*

Division of Graduate Studies

IN this first annual report of the Director of Graduate Studies, only the more important features of the year's work are included:

ENROLLMENT

Several hundred inquiries concerning graduate studies were received and all were answered, but in the majority of cases no further correspondence ensued. It is evident that individual graduate students, like the undergraduates, make applications at several schools; hence the total number of inquiries received is hardly a measure of total number of candidates for graduate study. The enrollment for the year, by semester, follows:

Major field	Degree Candidates		Non-Degree Candidates	
	Fall	Spring	Fall	Spring
Agricultural Economics.....	1	2	..	..
Agronomy.....	1	1	..	..
Bacteriology.....	1	1	..	..
Botany.....	2	3	..	..
Chemical Engineering.....	3	3	..	..
Chemistry.....	7	7	..	..
Economics.....	1*	1*	..	..
Physics.....	1	1	..	..
Zoology.....	2	2	..	..
Totals.....	19	21	22	25

*Does not include Loring Thompson, who wrote his thesis *in absentia*.

DEGREES CONFERRED

Three Master of Science degrees were conferred at the June Commencement — upon John Moran and Rosario Lombardo in Chemistry, and Loring Thompson in Economics.

All but two of the candidates for degrees are in residence. One of the two teaches at South Kingstown High School, the other in the Rhode Island College of Pharmacy.

MEETINGS ATTENDED

1. The sessions of the Graduate Section of the Association of Land-Grant Colleges and Universities were attended in Chicago. Copies of the written report of these sessions were

sent to all members of the Committee on Graduate Study and to the President.

2. The sessions of the New England Conference on Graduate Education were likewise attended by Professors Smith and Thomas and the director. The full report of these sessions is published by the secretary of the conference and is mailed to the presidents and to the deans or directors of graduate study of the member institutions.

Two parts of the program were of particular interest. One was the graduate student panel, presided over by Dean Bunker of Massachusetts Institute of Technology. A number of suggestions were made in this virtually unrehearsed discussion. Although some of these were obviously premature and indicated lack of experience concerning the practical limitations of graduate school administration, others were pertinent and revealing. The lack of personal supervision and intimate contact with major professors was emphasized. The fallacy of expecting graduate students to survive equally well under all degrees of excellence in presentation of graduate courses was another point bluntly discussed. There were interesting remarks made concerning the fundamental reason for undertaking graduate training; these ranged from vocational to spiritual. The panel discussion was judged a success and may be repeated in the future (and even broadcast over a radio network).

The second point of general interest centered on the preparation of college teachers. Dean Tilton of Tufts read a well-organized paper on the subject and a vigorous discussion followed. Dean Tilton and his committee suggested that this preparation should be done primarily by subject matter departments, with or without advice and cooperation of professional education departments. This subject was discussed at the Chicago meetings, previously reported, and seems likely to receive added attention in the future.

EXPANSION OF THE GRADUATE PROGRAM

Various viewpoints have been expressed concerning (a) the advisability of expanding our graduate offerings or (b) of maintaining our program at its present level. Many problems

are involved in the initiation or expansion of graduate study. The director believes that his official duties do not include the promotion of additional graduate programs. He believes rather that effective administration of the existing program is his main task. No efforts are therefore being made by him to initiate graduate work in departments not now offering such advanced work, and none are contemplated. He has been willing, however, to cooperate with those departments interested in developing their programs. It would be well for the president to indicate what general policies he feels should be followed in this regard, particularly in light of our over all academic and research programs.

SEPARATE BUDGET FOR GRADUATE STUDIES

With (a) the increase in administrative details and (b) the proposed attendance at certain meetings by the director, and by perhaps one or two members of the Graduate Committee in addition at other meetings, the question of budgetary matters has assumed greater importance. The director, with misgivings because of resulting added routine work, suggests that the effective method of handling such financial matters is to provide a special Graduate Studies Budget. The amount of money in this budget can be tentatively judged on the basis of past expenditures from several other budgets, including those of the president and of the Botany Department.

VERNON I. CHEADLE, *Director*

Division of General College Extension

IN common with the parent campus and with educational institutions generally, the academic year 1946-1947 saw a considerable increase, almost a doubling, in enrollments of the Division of General College Extension. Total course enrollments for the past academic year were 3,949, while 2,236 students were registered in the 1945-1946 sessions.

The Division offered programs in the following categories:

- Evening Business Administration Courses
- Evening Insurance Courses
- Evening Engineering Courses
- Evening Non-credit Technical Courses
- Evening Home Economics Courses
- Industrial Training Service
- Workers Education Courses
- Institutes and Conferences
- Full-time Centers

A complete statistical summary of enrollments for the year is given on pages 90-94.

EVENING BUSINESS ADMINISTRATION COURSES

Enrollment in Evening Business Administration courses reached a total of 1,242, which attests to the continuing value of this work to the people of the State. For the most part, students enrolling in these courses were seeking information which would increase their professional or technical skills, as there is no arrangement whereby a student can work toward a degree by attending evening courses. One of our problems for the future is to devise some method whereby formal recognition can be granted to students who complete programs of evening study.

Business Administration courses given for the first time were Bank Insurance, Comprehensive Accounting Theory Review, and three sections of Fundamentals of Real Estate.

EVENING INSURANCE COURSES

The Insurance Program enrolled 407 students during the year and the Division was thus able again to increase its

service to the insurance profession of the State. Since the start of the program in 1943, over one thousand students have been enrolled for insurance education.

The scholarship prize fund donated by Mr. Stephen Carey, III, of the Providence Washington Insurance Company was generously increased this year to \$150, so that the best students in Inland Marine Insurance (Newport course), Casualty Insurance, Fire Insurance, Inland Marine Insurance (Providence course), General Principles of Insurance, and Automobile Insurance were each awarded a prize of \$25.

EVENING ENGINEERING COURSES

Credit courses in Engineering attracted 139 students during the year. For the most part, these courses were in the field of mathematics, as the lack of laboratory facilities prohibits the offering of other engineering courses.

EVENING NON-CREDIT TECHNICAL COURSES

During the year 517 students were enrolled in the elementary courses making up the Technical Institute. It has been found difficult to interest significant numbers of students in the more advanced sections of the Technical Institute Program due to insufficient laboratories. In addition to the program of Technical Institute courses which were established two years ago, technical courses of a non-credit nature were offered in construction, including Construction Estimates and Costs as well as Small Homes Construction. The latter course was designed in cooperation with the Providence Real Estate Board and the Rhode Island Home Builders Association and attracted 161 registrants, the largest number ever recorded for a single extension course.

EVENING HOME ECONOMICS COURSES

In cooperation with the Rhode Island Nursing Association and other nursing groups of the State, two courses in Educational Psychology were offered during the first semester; one in Newport and one in Providence. During the second semester two more courses in Educational Psychology were offered in

Providence. Also, a course in Principles of Public Health Nursing was offered for the Public Health Nursing Association.

INDUSTRIAL TRAINING SERVICE

Through the Industrial Training Service, courses are designed for a particular industry and offered either at the plant of the industry requesting the service or at some other equally convenient location.

During the past year the following companies participated in this service:

<i>Course</i>	<i>Company</i>	<i>Enrollment</i>
Industrial Relations	Hemphill Company	14
Industrial Relations	Hemphill Company	18
Industrial Relations	Acushnet Process Company.....	8
Mechanics Training	Owens-Corning Fiberglas Corp.....	25
Elementary Electronics	Berry Engineering Service.....	14
	Standard Machinery Company	
	Technical Service, Incorporated	
	Gazda Engineering Company	
	Union Wadding Company	
	McGowan Engineering Company	
	Gorham Manufacturing Company	
Ferrous Metallurgy	Congdon & Carpenter Company.....	26
Industrial Relations	Acushnet Process Company.....	13
Industrial Relations	Crown Manufacturing Company.....	30

WORKERS EDUCATION COURSES

Although the rise in the number of persons attending the Workers Education classes is very significant, from 247 to 589, the most impressive development has been the support given to the College programs by the cooperation of all the labor organizations of the State.

During the past year, the instructional staff for the Workers Education Program has increased in both quality and quantity. The Rhode Island State College program is attracting instructors of the highest caliber, many of whom travel a hundred miles to conduct one session.

Special note should be taken of the course in Legislative Civics offered for the Textile Workers Union of America, Congress of Industrial Organizations. Lecturers for this course included Judge William E. Powers, Member of the Rhode Island General Assembly; the Honorable Arthur M. Cottrell, Senator

from Westerly, Rhode Island General Assembly; the Honorable Aime J. Forand, Representative of the First Rhode Island District; the Honorable John W. Moakler, Jr., Member of the Providence City Council.

INSTITUTES AND CONFERENCES

The Division has continued to serve business and professional groups by offering institutes and conferences either on the campus or at some other suitable location.

Textile Workers Union of America Institute

Thirty-five members of trade unions in the Rhode Island and southeastern Massachusetts area met on the campus during the week August 18 to 24, 1946, for a full-time, one-week institute. We were honored to have Governor John O. Pastore and Mr. Emil Rieve, President of the Textile Workers Union of America and Vice-President of the Congress of Industrial Organizations, address the opening meeting. The program served as the opening function of the 1946-47 Workers Education Program.

Life Insurance Sales Congress

The third annual meeting of the life insurance people of the State was held at the Lincoln Inn in Lincoln, Rhode Island, on October 17, 1946. A one-day meeting featuring noted authorities on life insurance attracted 84 registrants.

Personnel Institute

The Personnel Institute which was held on campus in the fall of 1945 was so successful that the College received requests from personnel managers throughout the State to make this an annual function. Accordingly, the second meeting of what is now the annual Personnel Institute was held on the campus on October 18, 1946, with 65 personnel directors from Rhode Island industry registered. A program of nationally known speakers on personnel problems was arranged.

Annual Institute on Federal Taxation

The fifth annual Institute on Federal Taxation was held on October 21, 23, 25, 28, and November 1, 1946, at the Provi-

dence Plantations Club. As it was found impossible for those people who are professionally concerned with federal taxation to clear their calendars for five consecutive evenings, the plans for the Federal Taxation Institute differed this year from previous years in that the five meetings were held over a two-week period in preference to one week. Over three hundred registrants attended the meetings.

Much to our regret, Mr. Peter Guy Evans, who served as chairman of the first four annual Institutes on Federal Taxation, resigned from this position to take up new duties as a member of the Excess Profits Tax Council in Washington. The work of Mr. Evans in arranging for prominent speakers to address the Tax Institute is deeply appreciated by the officers of administration of both the Extension Division and the Rhode Island State College. We were fortunate to be able to obtain the services of Mr. J. Stanley Halperin, Counselor-at-law, New York City, as chairman of this committee.

Rhode Island Employment Service Institute

The Rhode Island State Employment Service requested the College to arrange a full-time, two-week program on employer relations. The meeting was scheduled to coincide with the mid-semester examination period at the Providence Center. Thirty-five students, representing four states in addition to Rhode Island, registered for the two-week conference.

OFF-CAMPUS CENTERS

In the spring of 1946, the State of Rhode Island felt its share of the nation-wide pressure on educational institutions offering work of collegiate grade. In an effort to relieve this pressure locally, Rhode Island State College proposed for the academic year 1946-47, and as long thereafter as might prove necessary, the establishment and continuance of off-campus centers.

Beause of certain technical problems created by the establishment of what amounted to a branch of the main college, academic programs identical with the freshman year at the main campus were not feasible. However, in all cases it was possible to schedule a modification of the regular freshman

program so that center students could achieve full sophomore standing at the end of one year of study at the center.

Providence Center

In Providence there was a likelihood that several hundred students who could not be accommodated in the freshman class on the campus might wish to attend a center. Arrangements were accordingly made for presenting the first year curricula in the Schools of Engineering, Business Administration, and Science at the Oliver Hazard Perry Junior High School on Hartford Avenue. The City of Providence, through its School Committee and the Superintendent of Schools, cooperated willingly in allowing the College to use extra space in this large, modern junior high school building.

In September, 1946, 320 students enrolled at the Providence Center and pursued classes in instruction under the educational supervision of the deans of the schools of Engineering, Business Administration, and Science. Members of the teaching faculty at Rhode Island State College in Kingston and additional instructors employed with the approval of the various deans and the Board of Trustees of State Colleges made up the faculty for the center. During the academic year standards in curriculum and grade requirements were identical with those maintained on the parent campus.

All students at the Providence Center were necessarily day students, although some commuted from Newport, Westerly, Woonsocket, and other cities and towns in Rhode Island. Classes were conducted between 9 a. m. and 5 p. m. daily, Monday through Friday. In addition to the regular classroom facilities in the Oliver Hazard Perry School, students also had use of the cafeteria, library, recreation room, gymnasium, and athletic field facilities. A reference library of books recommended by the various instructors was begun, and the books were kept on reserve in the school library. The chemistry laboratory classes were held in a laboratory at Central High School in down-town Providence.

Early in the school year the students at the Providence Center organized a Student Senate and General Assembly. Upon approval of a constitution, officers were elected and in-

stalled, and student-operated extra-curricular activities were begun.

The Student Senate, at semi-monthly meetings, helped in the organization of student activity groups, the supervision of the recreation room, and the conduct of social affairs. During the year three major dances were held: the Winter Ball on December 13, 1946, the Frosh Hop on March 14, 1947, and the Farewell Ball on June 6, 1947.

A Press Club authorized by the Student Senate began publication of a bi-weekly newspaper, the RAMBLER, in January, 1947. The paper appeared through May, 1947, presenting items of school news, editorials expressing student opinion, pertinent notices, and feature articles written by students.

In November, 1946, the Providence Center, with the assistance of the Physical Education Department of Rhode Island State College, organized a voluntary athletic program. Two physical education instructors were appointed, and supervised classes and sports were conducted in the school gymnasium three afternoons each week from 3 to 5 p. m. Intramural activities included competition in handball, basketball, wrestling, and soft ball. A center basketball team competed successfully with other college freshman teams. In the spring of 1947, center students interested in track were coached one afternoon each week. Several of these students participated on the Rhode Island State College Junior Varsity track team in meets held in Kingston.

Bristol Center

The Rhode Island State College Bristol County Center was conducted at the Colt Memorial High School in Bristol from September, 1946, to June, 1947, to provide a freshman-year program for residents of Bristol and surrounding towns, including Newport.

The Bristol Center held classes from 3 p. m. to 10 p. m. Monday through Friday. In other respects, the Bristol Center program was similar to the program in effect at the Providence Center and under the same educational and administrative direction.

Early in the school year the students at the Bristol Center organized a Student Senate. The Student Senate helped in the organization of student activity groups and the conduct of social affairs. At the end of the year a dance was held for all students.

In the fall of 1946 the Bristol Center organized an intramural basketball league, and games were played in the Bristol YMCA.

PROFESSIONAL ACTIVITIES

Professional Meetings

Two staff members of the division attended the one-week annual meeting of the National University Extension Association in Atlantic City, May 4 through May 9, 1947. A representative was also present at the annual Washington's Birthday Workers Education Conference on February 22 and 23, 1947, in New York City.

Speaking Engagements

During the year, staff members were invited to address various groups as indicated in the following schedule:

- U. S. Student Assembly—Hudson Shore, New York—Dec. 6, 1946—Subject: Workers' Education—Speaker: Clifford L. Rosmond.
- National University Extension Association—Atlantic City, New Jersey—May 4-9, 1947—Subject: Workers' Education—Speaker: J. B. M. Arthur.
- University Labor Education Conference—Washington, D. C.—May 28-29, 1947—Subject: Workers' Education—Speaker: J. B. M. Arthur.
- Sarah Lawrence Workers Education Conference—Sarah Lawrence College, Bronxville, New York—May 13, 1947—Subject: Workers' Education—Speaker: J. B. M. Arthur.
- Regional Conference of Social Work—Wheaton College, Norton, Mass.—May 22, 1947—Subject: Function of the Community in Adult Education—Speaker: J. B. M. Arthur.
- Massachusetts A. F. L. Labor Institute—Holy Cross College, Worcester, Mass.—June 21, 1946—Subject: Workers' Education—Speaker: Clifford L. Rosmond.

Professional Committees

The director was a member of the Workers Education Committee and of the Revenue Committee of the National University Extension Association. He also served as chairman of the Committee on Education for the Providence Chapter, National Office Management Association.

PUBLIC RELATIONS

In an effort to have the people of the State know more generally of the services which Rhode Island State College performs and to enlist the support of the people of the State for the campus building program, the Division of General College Extension wrote and produced two radio programs, one outlining Extension services to business and industry, and the second outlining the Extension services to members of the labor organizations of the State. Prominent business, industrial, and labor leaders participated with staff members of the Extension Division in both of these programs.

EXHIBITS

Exhibitions of the work of the Division were shown as follows:

<i>Meeting</i>	<i>Date</i>	<i>Topic</i>
Association of Governing Boards of State Universities and Allied Institutions	Oct. 8, 9, 10, 1946	Workers' Education
Convention of the Rhode Island State Branch, American Federation of Labor	Oct. 26, 27, 1946	Workers' Education
State Convention of the Rhode Island State Council, Congress of Industrial Organizations	Nov. 30,-Dec. 1, 1946	Workers' Education
U. S. Student Assembly, Hudson Shore, New York	December 6, 1946	General Extension Activities
National University Extension Association Conference	May 4, 9, 1947	Workers' Education
U. S. Department of Labor, University Labor Education Conference	May 28, 29, 1947	Workers' Education

No recital of the accomplishments of the Division of General College Extension for the academic year 1946-1947 would be complete without saying that the blueprint for extension work so ably laid down by Director Knowles, before his resigning to accept the presidency of the Associated Colleges of Upper New York, is still the framework within which the activities of this division are carried on.

COOPERATING ORGANIZATIONS

The following business, professional, and labor organizations have cooperated with the Division of General College Extension during the academic year 1946-1947:

Banking

- R. I. Bankers Association
- R. I. Chapter American Institute of Banking

Business

Providence Real Estate Board
R. I. Home Builders Association

Engineering

R. I. Chapter, American Society of Tool Engineers
R. I. State Division of Industrial Inspection

Insurance

R. I. State Department of Insurance
R. I. Life Underwriters Association
R. I. Association of Insurance Agents
R. I. Chapter, Chartered Life Underwriters Association
R. I. State Division of Workmen's Compensation

Labor

R. I. State Department of Labor
R. I. State Branch, American Federation of Labor
R. I. State Council, Congress of Industrial Organizations.
Railroad Brotherhoods
Industrial Trades Union
International Association of Machinists

Management

Associated Industries of Rhode Island
Personnel Institute

Manufacturing

Acushnet Process Company
Owens-Corning Fiberglas Corporation
Congdon & Carpenter Steel Company
Crown Manufacturing Company
Hemphill Company

Miscellaneous

Blackstone Valley Safety Council
R. I. Truck Owners Association
Chambers of Commerce—Providence, Pawtucket, Westerly,
Woonocket, and Newport
R. I. State Employment Service

Nursing

Providence District Nuring Association
State Organization of Public Health Nursing
City Health Department—Providence, Pawtucket, Woonsocket
St. Joseph's Hospital

ENROLLMENT SUMMARY

FALL SEMESTER

GENERAL EVENING EXTENSION COURSES

	<i>Men</i>	<i>Women</i>	<i>Total</i>
Air Conditioning	22	0	22
Applied Mechanics	14	0	14
Automobile Insurance	12	1	13
Bank Insurance	20	2	22
Business Law I.....	20	2	22
CLU Part A.....	29	1	30
CLU Part A (Newport).....	15	1	16
CLU Part D.....	11	1	12
Casualty Insurance	22	6	28
College Algebra	29	1	30
Comprehensive Accounting Theory Review.....	18	1	19

Construction Estimates and Costs.....	35	0	35	
Economic Principles	16	2	18	
Educational Psychology (Newport).....	0	21	21	
Educational Psychology (Providence).....	0	15	15	
Electricity A. C. I.....	24	0	24	
Electricity D. C. I.....	25	0	25	
Elementary Accounting E 10 A Section I.....	7	8	15	
Elementary Accounting E 10 A Section II.....	23	4	27	
Elementary Accounting (Newport).....	9	2	11	
Elementary Electronics	19	0	19	
Elements of Tool Design.....	17	0	17	
English Composition	23	6	29	
Fire Insurance I.....	31	5	36	
General Chemistry I.....	12	4	16	
General Chemistry II.....	10	4	14	
General Principles of Insurance.....	32	6	38	
Heating and Ventilating.....	19	0	19	
Industrial Management Principles.....	34	0	34	
Industrial Safety and Accident Control.....	18	3	21	
Inland Marine Insurance (Newport).....	8	10	18	
Inland Marine Insurance.....	16	1	17	
Marketing Principles	16	0	16	
Motion and Time Study.....	24	1	25	
Personnel Administration	20	9	29	
Principles of Advertising.....	14	8	22	
Principles of Radio.....	14	1	15	
Public Speaking	8	3	11	
Real Estate	43	7	50	
Real Estate	46	6	52	
Real Estate	47	10	57	
Refrigeration	22	0	22	
Salesmanship	26	1	27	
Tax Accounting	14	4	18	
Technical Calculations I.....	12	0	12	
Technical Calculations II.....	23	0	23	
Technical Drawing I.....	12	0	12	
Technical Drawing II.....	10	0	10	
Transportation	10	0	10	
Trigonometry	18	1	19	
			—	1,127
WORKERS EDUCATION PROGRAM				
	<i>Men</i>	<i>Women</i>	<i>Total</i>	
Labor Legislation (West Warwick).....	18	5	23	
Labor Legislation	15	0	15	
			—	38
IN-SERVICE COURSES				
Industrial Relations (Hemphill Company).....	14	0	14	
Industrial Relations (Hemphill Company).....	17	1	18	
			—	32
INSTITUTES AND CONGRESSES				
Life Insurance Sales Congress.....	66	18	84	
Personnel Institute	58	7	65	
Tax Institute	270	31	301	
T. W. U. A. Institute.....	23	12	35	
			—	485
Total Enrollments, Fall Semester.....				1,682

SPRING SEMESTER

GENERAL EVENING EXTENSION COURSES

	<i>Men</i>	<i>Women</i>	<i>Total</i>
Analytical Geometry	19	0	19
Applied Mechanics (Westerly).....	15	0	15
Business Law I.....	19	2	21
Business Law II.....	10	2	12
CLU Part A.....	23	0	23
CLU Part A (Newport).....	12	0	12
CLU Part B.....	9	0	9
CLU Part D.....	8	1	9
Casualty Insurance I.....	21	2	23
Casualty Insurance II.....	16	0	16
College Algebra	28	0	28
College Algebra (Quonset).....	15	0	15
Construction Estimates and Costs.....	14	0	14
Educational Psychology	0	35	35
Educational Psychology	0	37	37
Electricity D. C. I.....	16	1	17
Electricity D. C. II.....	20	0	20
Elementary Accounting E 10 A.....	32	6	38
Elementary Accounting E 10 B.....	18	7	25
Elementary Accounting (Newport).....	9	1	10
Elementary Electronics	15	0	15
Elementary Spanish (Quonset).....	9	4	13
Elements of Tool Design I & II.....	19	0	19
English Composition	18	2	20
Fire Insurance I.....	20	4	24
Fire Insurance I (Newport).....	5	7	12
Fire Insurance II.....	15	2	17
General Chemistry I & II.....	19	2	21
General Metallurgy	14	0	14
General Principles of Insurance.....	15	3	18
Industrial Management E20.....	20	1	21
Industrial Management E21.....	24	1	25
Industrial Relations	26	2	28
Introduction to Air Conditioning.....	20	0	20
Marketing Principles	11	2	13
Motion Study	11	0	11
Personnel Administration	11	6	17
Principles of Advertising.....	17	0	17
Principles of Public Health Nursing.....	0	53	53
Principles of Radio I & II.....	13	0	13
Public Speaking	11	0	11
Real Estate	48	3	51
Salesmanship	22	1	23
Small Homes Construction.....	153	8	161
Statistics	6	6	12
Technical Calculations I.....	20	0	20
Technical Calculations II.....	16	0	16
Technical Drawing I.....	14	0	14
Time Study	14	0	14
Transportation	22	3	25
Trigonometry	28	0	28
Workmen's Compensation (Advanced).....	14	0	14
		—	1,178

WORKERS EDUCATION PROGRAM

	<i>Men</i>	<i>Women</i>	<i>Total</i>	
Collective Bargaining (United Steel Workers).....	27	2	29	
Collective Bargaining (ITU).....	36	5	41	
Job Evaluation & Merit Rating.....	31	0	31	
Trends in Labor Legislation (TWUA CIO).....	24	8	32	
Principles of Stewardship (TWUA CIO).....	18	24	42	
Principles of Stewardship (TWUA CIO).....	34	12	46	
Principles of Stewardship (Manton).....	12	18	30	
Principles of Stewardship (Esmond).....	16	2	18	
Railroad Retirement Act (RR Brotherhoods).....	16	1	17	
Collective Bargaining (United Steel Workers).....	25	0	25	
Trends in Labor Legislation (TWUA CIO).....	25	4	29	
Trends in Labor Legislation (ITU).....	21	3	24	
Public Speaking (TWUA CIO).....	21	7	28	
Legislative Civics (TWUA CIO).....	60	10	70	
Arbitration (AFL)	30	4	34	
Collective Bargaining (CIO).....	15	3	18	
Principles of Stewardship (CIO).....	22	16	38	
		—	551	
IN-SERVICE COURSES				
Industrial Relations-Acushnet Process Co.....	8	0	8	
Mechanics Training—Owens-Corning Fiberglas.....	25	0	25	
Elementary Electronics (Special course).....	14	0	14	
Ferrous Metallurgy—Congdon & Carpenter Co.....	26	0	26	
Industrial Relations—Acushnet Process Co.....	13	0	13	
Industrial Relations—Crown Mfg. Co.....	29	1	30	
		—	116	
INSTITUTES				
R. I. Employment Service Institute.....	30	5	35	
			35	
Total Enrollments, Spring Semester.....			1,880	

SUMMARY—GENERAL EXTENSION PROGRAM

<i>Program</i>	—First Semester—			—Second Semester—			<i>Total</i>
	<i>Men</i>	<i>Women</i>	<i>Total</i>	<i>Men</i>	<i>Women</i>	<i>Total</i>	
General Evening Ext. Courses.....	969	158	1127	974	204	1178	2,305
Workers Education	33	5	38	432	119	551	589
In-Service Courses	31	1	32	115	1	116	148
Institutes and Congresses.....	417	68	485	30	5	35	520
	1450	232	1682	1551	329	1880	3,562

OFF-CAMPUS CENTERS

	Men		Women		
	Veterans	Non-Veterans	Veterans	Non-Veterans	Total
First Semester					
Bristol	52	9	0	6	67
Providence	210	67	1	42	320
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
	262	76	1	48	387
Second Semester					
Bristol	39	7	0	2	48
Providence	185	59	1	29	274
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
	224	66	1	31	322

J. B. McKEE ARTHUR, JR., *Director*

Staff Changes

Appointments

- Irma E. Krakower, Instructor in English, July 1, 1946. B.A., New York University, 1945.
- Eugene C. Winslow, Instructor in Chemistry, July 1, 1946. A.B., Middlebury College, 1940; M.S., Rhode Island State College, 1942; Ph.D., Cornell University, 1944.
- Dagmar C. Gustafson, Assistant Professor of Clothing and Textiles, July 1, 1946. B.S., University of Nebraska, 1926; M.S., Iowa State College, 1938.
- Paul E. Reynolds, Assistant Professor of English, July 1, 1946. A.B., Clark University, 1925; M.A., Harvard University, 1927; Ph.D., Harvard University, 1938.
- John Sanik, Jr., Instructor in Chemistry, July 1, 1946. B.S., Rhode Island State College, 1942.
- Alexander M. Cruickshank, Instructor in Chemistry, July 1, 1946. B.S., Rhode Island State College, 1943.
- Donald Tilton, Assistant Professor of History and Political Science, July 1, 1946. B.A., St. Stephens, 1928; M.A., Harvard University, 1929; Ph.D., Princeton University, 1941.
- John O. Stitely, Instructor in History and Political Science, July 1, 1946. A.B., Bradley Polytechnic Institute, 1934; A.M., University of Iowa, 1939.
- Merle J. McIntosh, Assistant Professor of Physical Education, July 1, 1946. B.S., State Teachers College, Pennsylvania, 1940.
- William T. Bryant, Instructor in Physics, July 1, 1946. B.S., Colby College, 1934; M.A., Boston University, 1935.
- Thomas C. Fuller, Instructor in Botany, July 1, 1946. B.S., Northwestern University, 1940; M.S., University of New Mexico, 1942.
- Theodore W. Kerr, Jr., Assistant Research Professor of Plant Pathology and Entomology, July 1, 1946. B.S., Massachusetts State College, 1936; Ph.D., Cornell University, 1941.
- Dura-Louise Cockrell, Assistant Professor of Child Development and Guidance, July 1, 1946. A.B., Texas Christian University, 1923; M.A., Columbia University, 1924; Ph.D., Yale University, 1932.
- Jean H. Swann, Assistant in Plant Pathology and Entomology, July 1, 1946. B.S., Rhode Island State College, 1945.
- Harriet L. Hall, Assistant in Horticulture, July 1, 1946. B.S., Rhode Island State College, 1945.
- Leah E. Stetson, Assistant Librarian, July 1, 1946. B.S., Simmons College, 1946.
- Raymond H. Stockard, Instructor in Mechanical Engineering, July 1, 1946. B.S., Rhode Island State College, 1939.
- Stanley E. Rodgers, Jr., Assistant Professor of Physics, July 1, 1946. A.B., Clark University, 1921; M.A., *ibid.*, 1923.
- L. Guy Brown, Professor of Sociology and head of the Department of Sociology, July 1, 1946. A.B., Dakota Wesleyan University, 1921; Ph.D., Ohio State University, 1932.
- Walter L. Simmons, Jr., Professor of English and head of the Department of English, July 1, 1946. A.B., Washington and Lee University, 1924; M.A., Harvard University, 1928; Ph.D., Ohio State University, 1938.
- Arnold V. Clair, Assistant Professor of Music, July 1, 1946. Diploma, Juilliard School of Music, 1932; M.A., University of Iowa, 1934.
- E. Arthur Robinson, Assistant Professor of English, July 1, 1946. B.A., Ohio Wesleyan University, 1932; M.A., Ohio State University, 1933; Ph.D., *ibid.*, 1936.
- Kenneth J. Barnard, Instructor in English, July 1, 1946. B.A., Yale University, 1942.
- Jordan D. Fiore, Instructor in English, July 1, 1946. B.S., State Teachers College, Bridgewater, 1940; M.A., Boston University, 1946.
- William A. Duffey, Instructor in English, July 1, 1946. B.A., Boston College, 1940; M.A., *ibid.*, 1941.
- Robert L. Hilliard, Instructor in English, July 1, 1946. A.B., Brooklyn College, 1942.
- Beatrice S. Demers, Instructor in Modern Languages, July 1, 1946. B.Ed., Rhode Island College of Education, 1929; M.A., Middlebury College, 1930; A.B., Pembroke College, 1937.

Donald Zinn, Instructor in Zoology, July 1, 1946. B.S., Harvard University, 1933; M.S., Rhode Island State College, 1937; Ph.D., Yale University, 1942.

Richard Cole, Instructor and Trainer in Physical Education for Men, July 1, 1946. B.S., Iowa State College, 1931; M.S., *ibid.*, 1935.

Eloise S. Kinney, Part-time Instructor in Music, July 1, 1946. A.B., Cornell University, 1922; M.A., Columbia University, 1945.

Harold J. Northup, Assistant in Research, July 1, 1946. B.S., Rhode Island State College, 1928; M.S., *ibid.*, 1945.

James L. Vaughan, Assistant Professor of Chemical Engineering, July 1, 1946. B.S., Massachusetts Institute of Technology, 1936; M.S., *ibid.*, 1937.

Jerry J. Gentile, Instructor in Civil Engineering, July 1, 1946. B.C.E., Rensselaer Polytechnic Institute, 1940.

Charles Young, Jr., Instructor in Mechanical Engineering, July 1, 1946. B.S., Illinois Institute of Technology, 1945.

Arthur W. Grove, Instructor in Electrical Engineering, July 1, 1946. B.S., Pennsylvania State College, 1925; M.S., Iowa State College, 1930.

Gerald B. Haggerty, Instructor in Mathematics, July 1, 1946. A.B., University of Scranton, 1927; M.A., Bucknell University, 1946.

James S. Newcomb, Instructor in Physics, July 1, 1946. B.A., Macalester College, 1938.

Christopher Noble, Instructor in Physics, July 1, 1946. M.S., Harvard University, 1928.

George W. Lees, Instructor in Accounting, July 1, 1946. B.S., Boston University, 1932; M.C.S., *ibid.*, 1939.

Milo Kimball, Associate Professor of Economics and Finance, July 1, 1946. B.S., Ohio Northern University, 1919; B.B.A., Boston University, 1921; M.B.A., *ibid.*, 1926.

Charles Carlson, Instructor in Industrial Management and Economics, July 1, 1946. B.A., Bard College, 1925; M.A., Columbia University, 1939.

Elizabeth W. Christopher, Instructor in Home Economics, July 1, 1946. A.B., Brown University, 1925; M.A., *ibid.*, 1930.

Elizabeth W. Crandall, Instructor in Home Economics, July 1, 1946. B.S., Kansas State College, 1935; M.S., *ibid.*, 1939.

Saul Barber, Instructor in Zoology, July 1, 1946. B.S., Rhode Island State College, 1941.

Francis J. Keneshea, Jr., Part-time Instructor in Chemistry, July 1, 1946. B.S., Rhode Island State College, 1943.

Jacob Shapiro, Instructor in Physics, July 1, 1946. B.S., College of the City of New York, 1944.

Irving Richards, Instructor in Mathematics, July 1, 1946. B.A., Brooklyn College, 1935; M.A., Columbia University, 1937.

Daniel E. Cowgill, Instructor in Mathematics, July 1, 1946. B.A., Oberlin College, 1945.

Orlando R. Pansa, Instructor in Mechanical Engineering, July 1, 1946. B.S., Rhode Island State College, 1944; Master's degree in Automotive Engineering, Chrysler Graduate School, 1946.

Alfonse R. Famiglietti, Instructor in Mechanical Engineering, July 1, 1946. B.S., Rhode Island State College, 1943.

Norbert V. Ryan, Instructor in Mathematics, July 1, 1946. B.S., Rhode Island State College, 1942.

Marvin Pitterman, Instructor in Economic Geography and Economics, July 1, 1946. B.S., State Teachers College of Buffalo, 1934; M.A., University of Michigan, 1936.

Alexander S. Sitek, Instructor in Mechanical Engineering, July 1, 1946. B.S., Northeastern University, 1943.

Francis J. Varieur, Instructor in Accounting and Economics, July 1, 1946. B.B.A., Bryant College, 1934; M.Ed., Rhode Island College of Education, 1944.

Raymond P. Maronpot, Assistant Professor of Modern Languages, July 1, 1946. A.B., New York University, 1917; M.A., Brown University, 1933; Ed.M., Boston University, 1942.

Clarence J. Lamb, Assistant Professor of History and Political Science, July 1, 1946. A.B., Brown University, 1915; LL.B., Suffolk Law School, 1923.

Olive B. Prunier, Assistant in Agricultural Chemistry, July 16, 1946. B.S., Rhode Island State College, 1943.

Ann Keegan, Research Assistant in Home Economics, July 16, 1946.

Sylvan I. Cohen, Assistant in Plant Pathology, August 1, 1946. B.S., State College of Washington, 1939; Ph.D., *ibid.*, 1942.

Sanford W. Hollis, Assistant to the Director of the Division of General College Extension, August 1, 1946. B.S., Rhode Island State College, 1940.

W. D. Burrington, Assistant Professor of Animal and Dairy Husbandry, August 1, 1946. B.S., University of Connecticut, 1922; M.S., *ibid.*, 1924.

Harold E. Gulvin, Instructor and Extension Specialist in Agricultural Engineering, August 1, 1946. B.S., Cornell University, 1930; M.Ed., University of Buffalo, 1946.

William G. Clark, Assistant to the Dean of Men, August 16, 1946. B.S., Rhode Island State College, 1940.

Richard N. Jorgensen, Instructor and Extension Specialist in Forestry, August 16, 1946. B.S., Yale University, 1941; M.S., *ibid.*, 1942.

Roger K. Leathers, 4-H Club Agent for the Southern Rhode Island District, August 16, 1946. B.S., M.Ed., Springfield College, 1934.

Marion W. Arnold, Associate 4-H Club Agent for Southern Rhode Island District, August 16, 1946. B.S., Rhode Island State College, 1936.

Leslie R. Stone, Jr., Graduate Assistant in Physics, September 1, 1946. B.S., Rhode Island State College, 1940.

Aram Henesian, Graduate Assistant in Chemical Engineering, September 1, 1946. B.S., Rhode Island State College, 1943.

Leo A. Spano, Graduate Assistant in Chemical Engineering, September 1, 1946. B.S., Rhode Island State College, 1943.

Margaret DeWees, Director of Women's Dormitories and Assistant Dean of Women, September 1, 1946. B.A., University of Iowa, 1935; M.A., Northwestern University, 1941.

Thelma Conrad King, Junior Assistant in Plant Pathology and Entomology, September 1, 1946. B.S., Rhode Island State College, 1943.

Mary E. Jacobson, Home Demonstration Agent for the Southern Rhode Island District, September 1, 1946. B.S., Iowa State College, 1936.

Germaine D. Seelye, Associate 4-H Club Agent for the Northern Rhode Island District, September 1, 1946.

Kenneth Mairs, Assistant Professor of Metallurgy, September 16, 1946. B.S., Pennsylvania State College, 1934; M.S., *ibid.*, 1935.

Matthew A. Puchalski, Graduate Assistant in Agronomy, September 16, 1946. B.S., Rhode Island State College, 1943.

Ruth Rogers, Assistant to the Director and Editor of the Agricultural Experiment Station, September 16, 1946. A.B., Middlebury College, 1929; B.S., Simmons College, 1936.

Mildred C. Anderson, Instructor in Chemistry, September 16, 1946. B.S., Rhode Island State College, 1944.

Harold C. Edelston, Part-time Instructor in Sociology, September 16, 1946. A.B., Brown University, 1941; M.S., Boston University School of Social Work, 1943.

Frank V. Bugielski, Graduate Assistant in Plant Pathology and Entomology, September 16, 1946. B.S., Rhode Island State College, 1941.

Shirley Elliott, Assistant Librarian, September 16, 1946. A.B., Acadia University; B.S., Simmons College.

Janet W. Rusk, Supervisor in the College Dining Service, September 16, 1946.

Carl T. Carlson, Extension Lecturer in Science, September 23, 1946. B.S., Rhode Island State College, 1929.

Leonard C. Mandell, Extension Lecturer in Mechanical Engineering, September 23, 1946. B.S., University of Alabama, 1941; M.S., Massachusetts Institute of Technology, 1946.

Charles B. Willard, Supervisor of the Providence Center, September 25, 1946. Ed.B., Rhode Island College of Education, 1934; A.M., Brown University, 1939.

Stephen G. Williamson, Jr., Extension Lecturer in Insurance, September 24, 1946. B.S., Gettysburg College, 1925.

Philip S. P. Carpenter, Extension Lecturer in Insurance, September 27, 1946. B.S., University of Pennsylvania, 1930.

Chester A. Berry, Director of Student Activities, October 1, 1946. B.S., Rhode Island State College, 1938.

Clifford W. Whiteside, Assistant to the Controller, October 1, 1946.

Marylin F. Morgan, Part-time Instructor in Accounting, October 1, 1946. B.S., Rhode Island State College, 1946.

Frederick Wilson, Jr., Part-time Instructor in Accounting, October 1, 1946. B.S., Rhode Island State College, 1939; M.S., *ibid.*, 1941.

Carl H. Stetson, Jr., Assistant in Chemistry, October 1, 1946. B.S., Rhode Island State College, 1943.

John Moran, Assistant in Chemistry, October 1, 1946. B.S., Rhode Island State College, 1942.

Otis B. Brown, Graduate Assistant in Accounting and Statistics, October 1, 1946. B.S., Rhode Island State College, 1941.

Leonora S. Topazio, Assistant in Home Economics Research, October 1, 1946. B.S., Rhode Island State College, 1944.

Elizabeth B. Knowlton, Hostess-Manager of the Kingston Inn Project, October 1, 1946.

Priscilla Annis, Supervisor in the Dining Service, October 1, 1946.

Townes M. Harris, Extension Lecturer in Accounting, October 1, 1946. M.A., University of Texas, 1922; M.B.A., Brown University, 1923.

Jordan D. Wood, Extension Lecturer in Business Administration, October 1, 1946. B.S., University of Illinois, 1932.

Francis E. Nute, Extension Lecturer in Business Administration, October 2, 1946.

Raymond Prince, Jr., Extension Lecturer in Insurance, October 2, 1946.

George T. Marsh, Assistant in the Controller's Office in charge of the College Bookstore, October 7, 1946.

William T. Hurley, Jr., Extension Lecturer in Business Administration, October 10, 1946. B.B.A., Boston University, 1928.

Bancroft Henderson, Jr., Instructor in Animal and Dairy Husbandry, October 11, 1946. B.S., Iowa State College, 1940.

Doris E. Lees, Part-time Instructor in English, October 16, 1946.

Joseph A. Murgo, Extension Lecturer in Electrical Engineering, October 17, 1946. B.S., Rhode Island State College, 1931.

Charles E. Shea, Extension Lecturer in Workers Education, October 17, 1946. Ph.B., Providence College, 1932.

John H. Hanover, Extension Lecturer in Accounting, October 21, 1946.

Charles V. Glynn, Extension Lecturer in Accounting, October 22, 1946. B.S., Rhode Island State College, 1940.

Frances C. Bessette, Graduate Assistant in Bacteriology, November 1, 1946. B.A., Skidmore College, 1943.

F. L. Van Hooser, Assistant in Animal and Dairy Husbandry, November 4, 1946.

Stephen L. Reed, Extension Lecturer in Real Estate, November 14, 1946. A.B., St. Bonaventure's, 1930; LL.B., Boston College Law School, 1936.

John Q. Jennings, Extension Lecturer in Labor Legislation, November 19, 1946. A.B., College of Western Reserve, 1931; LL.B., Western Reserve Law, 1933.

Leland C. Grumbles, Assistant Research Professor of Poultry Husbandry, November 25, 1946. D.V.M., Texas Agricultural and Mechanical College, 1945.

Eugene S. Fiske, Assistant to the Director of the Division of General College Extension, December 9, 1946. B.S., Rhode Island State College, 1940.

Harold T. Day, Part-time Instructor in Physical Education, December 10, 1946. Ed.B., Boston University, 1938.

Edward C. Moravec, Part-time Instructor in Physical Education, December 10, 1946. S.S. in Physical Education, Harvard University, 1929.

Carolyn M. Sherman, Visiting Professor of Psychology, January 1, 1947. Ph.B., Brown University, 1920; A.M., *ibid.*, 1922; D.Ed., Columbia University, 1944.

Alfred L. Moseley, Instructor in Psychology, January 1, 1947. A.B., Emory University, 1942; A.M., Boston University.

Merritt B. Jones, Instructor in English, January 1, 1947. B.A., Louisiana State University, 1941; M.A., Pennsylvania State College, 1942.

Robert C. Haire, Instructor in Physical Education for Men, January 1, 1947. B.S., Rhode Island State College, 1928.

Herbert W. Peabody, County Agricultural Agent for the Eastern Rhode Island Farm Bureau District, January 1, 1947. B.S., Rhode Island State College, 1935.

George B. LeBeau, Extension Lecturer in Workers Education, January 8, 1947.

James J. McAleer, Extension Lecturer in Workers Education, January 14, 1947. Ph.B., Providence College, 1932; M.C.S., Dartmouth College, 1934; LL.B., Boston College, 1940.

Jeremiah E. Walsh, Extension Lecturer in Workers Education, January 21, 1947.

Howard G. Gamser, Extension Lecturer in Workers Education, January 27, 1947. B.S.S., College of the City of New York, 1940; M.A., Columbia University, 1941.

Arthur F. Hanley, Extension Lecturer in Salesmanship, January 27, 1947. B.S., Rhode Island State College, 1936.

Ralph F. Albert, Extension Lecturer in Workers Education, January 29, 1947. LL.B., Boston University Law School, 1914.

Mitchell Goodman, Extension Lecturer in Workers Education, January 30, 1947. B.A., Harvard University, 1946.

Ernest B. Goodwin, Instructor in Electrical Engineering, February 1, 1947. B.S., Rhode Island State College, 1932; M.A., Boston University, 1939.

Lynette G. Olsen, Instructor in Bacteriology, February 1, 1947. B.S., Rhode Island State College, 1935; M.S., *ibid.*, 1937.

Loree Gilbert, Part-time Instructor in Sociology, February 1, 1947. B.A., Mary Hardin Baylor, 1926; B.S., Simmons, 1931.

Robert V. Bardsley, Instructor in Mechanical Engineering, February 1, 1947. B.S., Rhode Island State College, 1935.

Frank E. Waite, Visiting Professor of Education, February 1, 1947.

Edna A. Thomasian, Junior Assistant in Plant Pathology and Entomology, February 3, 1947.

Susan G. Daniels, Assistant Director of the College Union, February 13, 1947. B.S., Rhode Island State College, 1946.

Charles L. Norton, Associate Professor of Dairy Production, February 16, 1947. B.S., University of Illinois; Ph.D., Cornell University.

William H. Morris, Assistant in Horticulture, February 16, 1947. B.B.A., Northeastern University, 1944.

Kenneth Kaye, Graduate Assistant in Botany, February 16, 1947. B.S., Rhode Island State College, 1947.

Ida Miele, Graduate Assistant in Botany, February 16, 1947. B.E., Rhode Island College of Education, 1943.

Cecilia E. Walsh, Extension Lecturer in Home Economics, February 19, 1947. B.S., Columbia University, 1934.

Theda L. Waterman, Extension Lecturer in Home Economics, February 19, 1947. B.S., University of Nebraska School of Nursing, 1931; Certificate of Public Health, 1940.

Mildred L. Hatton, Extension Lecturer in Home Economics, February 19, 1947. R.N., Rhode Island Hospital, 1922; B.S., Columbia University, 1934.

Philip D. Creer, Extension Lecturer in Civil Engineering, February 25, 1947. Bachelor of Architecture, University of Pennsylvania, 1927.

Vincent A. McKivergan, Extension Lecturer in Business Administration, February 25, 1947. Ph.B., Brown University, 1931; A.M., *ibid.*, 1939.

Mildred B. Barry, Extension Lecturer in Home Economics, February 26, 1947. B.S., Rhode Island State College, 1935.

Edith M. Sigel, Junior Assistant in Poultry Husbandry, March 1, 1947.

John B. Rowell, Assistant in Plant Pathology and Entomology, May 16, 1947. B.S., Rhode Island State College, 1941.

W. Robert Kenyon, College Engineer, May 16, 1947. B.S., Rhode Island State College, 1936.

Albert W. Feldman, Assistant Research Professor of Plant Pathology, June 1, 1947. B.A., University of Illinois, 1942; M.S., North Carolina State College, 1944; Ph.D., University of Minnesota, 1947.

Burton K. Harris, Junior Assistant in Agronomy, June 1, 1947. B.S., Rhode Island State College, 1911.

Captain Gabriel A. Ivan, Assistant Professor of Military Science and Tactics, June 11, 1947.

Wilma B. Chapin, Instructor in Nursing Arts, June 15, 1947. B.S., Columbia University, 1925.

Captain Howard K. Welch, Assistant Professor of Military Science and Tactics, June 16, 1947.

Captain Leslie F. Coates, Assistant Professor of Military Science and Tactics, June 23, 1947.

Resignations and Appointments Terminated

S. Truman Clary, Assistant Agricultural Chemist, July 15, 1946.

Albert Wolinsky, Instructor in Mathematics, July 31, 1946.

Lois H. Strassburg, Instructor in Clothing and Textiles, August 31, 1946.

Asa S. Knowles, Dean of the School of Business Administration, Professor of Industrial Administration, and Director of the Division of General College Extension, August 31, 1946.

Kenneth L. Knickerbocker, Professor of English, August 31, 1946.

Kenneth E. Wright, Associate Professor of Botany, August 31, 1946.

Harry L. Keil, Assistant Research Professor of Plant Pathology, August 31, 1946.

Meredith Mayfield, Instructor in Home Economics, August 31, 1946.

Ruth Cummings, Supervisor in the College Dining Service, August 31, 1946.

W. D. Burrington, Assistant Professor of Animal and Dairy Husbandry, August 31, 1946.

Ann McFarland, Assistant Director of Women's Dormitories, September 15, 1946.

Barbara Johnson, Assistant Librarian, September 15, 1946.

Lois E. Brow, Assistant in Home Economics, September 30, 1946.

Guy N. Loofbourrow, Instructor in Zoology, September 30, 1946.

Kenneth O. Bennett, Assistant Controller and Manager of the College Bookstore, October 6, 1946.

Sanford W. Hollis, Assistant to the Director of General College Extension, December 15, 1946.

Merrill W. Abbey, County Agricultural Agent for the Eastern Rhode Island District, December 31, 1946.

Alan D. Grinsted, Associate Professor of Psychology and Associate in Student Personnel, December 31, 1946.

Lester E. Erwin, Assistant Professor of Bacteriology and Assistant in Physical Education, December 31, 1946.

Thelma C. King, Junior Assistant in Plant Pathology and Entomology, January 15, 1947.

Amy R. Holway, Associate Professor of Child Development and Guidance, January 31, 1947.

Beatrice Browning, Assistant Director of the College Union, January 31, 1947.

Ervin T. Bullard, Instructor in Horticulture, February 15, 1947.

Edward C. McAleer, Instructor in English, February 15, 1947.

Olive L. Prunier, Assistant in Agricultural Chemistry, March 31, 1947.

Janet K. Munroe, Research Assistant in Home Economics, April 30, 1947.

William G. Clark, Assistant to the Dean of Men, April 30, 1947.

Janet W. Rusk, Supervisor in the College Dining Service, May 15, 1947.

Major Joseph P. Parker, Assistant Professor of Military Science and Tactics, June 9, 1947.

Robert C. Pitman, Junior Assistant in Agricultural Economics, June 16, 1947.

Charles N. Young, Jr., Instructor in Mechanical Engineering, June 30, 1947.

Jacob Shapiro, Instructor in Physics, June 30, 1947.

James L. Vaughan, Assistant Professor of Chemical Engineering, June 30, 1947.

Christopher Noble, Instructor in Physics, June 30, 1947.

William A. Duffey, Jr., Instructor in English, June 30, 1947.

Richard S. Davidson, Assistant Plant Pathologist, June 30, 1947.

Norman W. Marble, Superintendent of Buildings and Grounds, June 30, 1947.

Stanley E. Rodgers, Assistant Professor of Physics, June 30, 1947.

Avery E. Rich, Assistant Research and Extension Professor of Agronomy, June 30, 1947.

A. Louise Anthony, Instructor in Physical Education for Women, June 30, 1947.

Francis J. Keneshea, Jr., Part-time Instructor in Chemistry, June 30, 1947.
Eloise S. Kinney, Part-time Instructor in Music, June 30, 1947.
Albert B. Nelson, Assistant Professor of Chemistry, June 30, 1947.
Merritt B. Jones, Instructor in English, June 30, 1947.
Norbert V. Ryan, Instructor in Mathematics, June 30, 1947.
Carolyn B. Young, Instructor in Art, June 30, 1947.
Edith M. Sigel, Junior Assistant in Poultry Husbandry, June 30, 1947.

Leave of Absence

Ray M. Batchelder, Assistant in Poultry Husbandry, August 16, 1946, for military service.
Albert B. Nelson, Instructor in Chemistry, September 1, 1946, for graduate study.
C. Lester Coggins, Assistant Professor of Physics, September 16, 1946.
Mary Alice Reilly, Assistant Professor of English, February 1, 1947.
Ruth E. Tucker, Associate Professor of Home Economics, March 1, 1947, for graduate study.

Return from Leave of Absence

Mabel E. Dickson, Assistant Professor of Business Administration, July 1, 1946.
William M. H. Beck, Associate Professor of Physical Education, July 1, 1946.
Carolyn L. Bryer, Instructor in Art, July 1, 1946.
David G. Geffner, Visiting Instructor in Business Law, July 1, 1946.
Wesley B. Hall, Professor of Electrical Engineering, October 16, 1946.
Ray M. Batchelder, Assistant in Poultry Husbandry, February 16, 1947.

Promotions

Olga P. Brucher, from Vice Dean and Professor of Home Economics to Dean and Professor of Home Economics, July 1, 1946.
Evelyn B. Morris, from Acting Dean of Women to Dean of Women, July 1, 1946.
Robert Cashman, from Assistant Director of Placement to Director of Placement, July 1, 1946.
Avery E. Rich, from Assistant in Agronomy to Assistant Research and Extension Professor of Agronomy, July 1, 1946.
Harry Keil, from Assistant in Plant Pathology to Assistant Research Professor of Plant Pathology, July 1, 1946.
William M. H. Beck, from Assistant Professor of Physical Education to Associate Professor of Physical Education, July 1, 1946.
Elmer A. Palmatier, from Instructor in Botany to Assistant Professor of Botany, July 1, 1946.
Herbert C. Knutson, from Instructor in Zoology to Assistant Professor of Zoology, July 1, 1946.
Frank L. Howard, from Associate Professor of Botany to Professor of Plant Pathology, July 1, 1946.
Paul McCorkle, from Assistant Professor of Physics to Associate Professor of Physics, July 1, 1946.
Edson I. Schock, from Assistant Professor of Mechanical Engineering to Associate Professor of Mechanical Engineering, July 1, 1946.
Harland F. Stuart, from Assistant Professor of Mechanical Engineering to Associate Professor of Mechanical Engineering, July 1, 1946.
Herbert H. Palmer, from Assistant Professor of Economics and Finance to Associate Professor of Marketing and Advertising, July 1, 1946.
Mabel E. Dickson, from Assistant Professor of Business Administration to Associate Professor of Business Administration, July 1, 1946.
Dorothy K. Conrad, from Assistant to the Director of General College Extension to Instructor in Business Administration and Assistant to the Director of General College Extension, July 1, 1946.

John R. Hackett, from Extension Instructor in Industrial Management, Field Representative in General College Extension, and Supervisor of the Insurance Education Program, to Assistant Director of the Division of General College Extension, September 1, 1946.

Change of Title

J. B. McKee Arthur, Jr., Assistant Director and Assistant Professor of General College Extension, designated Acting Director of the Division of General College Extension and Assistant Professor of General College Extension, August 1, 1946.

George A. Ballentine, Associate Professor of Economics, designated Acting Dean of the School of Business Administration and Associate Professor of Economics, August 1, 1946.

Mason H. Campbell, from Dean of the School of Agriculture and Home Economics and Director of the Agricultural Experiment Station to Dean of the School of Agriculture and Director of the Agricultural Experiment Station, July 1, 1946.

Charles A. Hall, from Alumni Secretary and Associate Director of Placement to Alumni Secretary, July 1, 1946.

Andrew J. Newman, from Director of Placement Service and Lecturer in Public Finance to Lecturer in Public Finance, July 1, 1946.

John C. Weldin, from Dean of Administration, Dean of Freshmen, and Lecturer in Bacteriology to Dean of Administration and Registrar, July 1, 1946.

List of Publications

AGRICULTURAL EXPERIMENT STATION:

- Christopher, E. P., and Shutak, V., Influence of Several Soil Management Practices upon Yields of Cultivated Blueberries. *Proc. of Amer. Soc. Hort. Sci.* Vol. 43, pp. 24-212, 1947.
- Cunningham, Charles H., Cultivation of the Virus of Infectious Bronchitis of Chickens in Embryonated Chicken Eggs. *Amer. Jour. Vet. Res.*, Vol. VIII, No. 27, pp. 209-212. April 1947.
- Cunningham, Charles H., and Stuart, H. O., The pH Stability of the Virus of Infectious Bronchitis of Chickens. *Cornell Veterinarian*, Vol. 37, No. 2. pp. 99-103. April 1947.
- Davidson, R. S., Factors Affecting the Development of Bacterial Soft Rot of Potato Tuber Initials. *Phytopathology*. (In press.) 1947.
- Davidson, R. S., and Rich, A. E., The Performance of New Fungicides for Controlling Late Blight on Potatoes. *Amer. Potato Jour.*, Vol. 24, No. 2, pp. 35-39. February 1947.
- DeFrance, J. A., Killing Weed Seeds in the Grass Seed Bed by the Use of Fertilizers and Chemicals. *Jour. Amer. Soc. Agron.*, Vol. 39, No. 6. pp. 530-535. June 1947.
- DeFrance, J. A., Weed-Free Compost. *Misc. Pub.* No. 31. 8 p. 1947.
- DeFrance, J. A., Water-Soluble Mercurials for Crabgrass Control in Turf. *Greenkeepers' Reporter*, January-February 1947.
- Delaplane, J. P., Batchelder, Ray M., and Higgins, T. C., Sulfaquinoxaline in the Prevention of *E. tenella* Infection in Chickens. *North American Veterinarian*, Vol. 28, pp. 19-24. January 1947.
- Gilbert, Roland W., Jr., Inspection of Feeds and Fertilizers, 1947.
- Hart, C. P., Stuart, H. O., and Higgins, T. C., Lobster Refuse Meal as a Protein Substitute in Chick Rations. *Misc. Pub.* No. 32. 4 p. 1947.
- Howard, F. L., Organic Mercury Fungicides as Foliage Sprays. *Agr. Chemicals*. 4 p. September 1946.
- Howard, F. L., and Schlenker, F. S., Magnitude of Residues on Apples from Orchards Sprayed with Organic Mercurials. *Proc. Amer. Soc. Hort. Sci.* In press.
- Howard, F. L., An Organic Cadmium Fungicide for Leaf Diseases. *Greenkeepers' Reporter*, March-April 1947. 1 p.
- Odland, T. E., and Smith, J. B., Further Studies on the Effect of Certain Crops on Succeeding Crops. *Jour. Amer. Soc. Agron.* Vol. 40, No. 1, pp. 99-107. 1948.
- Pieniazek, S. A., Christopher, E. P., and McElroy, L. A. Further Data on the Control of Storage Scald of Apples by Means of Carbon Dioxide. *Proc. Amer. Soc. Hort. Sci.* Vol. 48, pp. 81-88. 1946.
- Pieniazek, S. A., and Christopher, E. P., The Use of Carbon Dioxide for Control of Rats in Cold Storage Rooms. *Proc. Amer. Soc. Hort. Sci.* Vol. 48, pp. 93-96, 1946.
- Potter, Charles, Precision Laboratory Spray Apparatus. (In manuscript.)
- Rich, A. E., and Odland, T. E., The Effect of Various Fertilizers on the Botanical Composition and Yield of Grass-Legume Hay. *Amer. Jour. of Agron.* Vol. 39, No. 5, May, 1947. pp. 390-394.
- Schlenker, F. S., The Determination of Alpha Amino Nitrogen as Ammonia after the Oxidation of Amino Acids by Ninhydrin. *Indus. & Eng. Chem., Anal. Ed.*, Vol. 19, pp. 471-474. July, 1947.
- Schlenker, F. S., Delaplane, J. P., and Batchelder, Ray M., Sulfathiazole Blood Levels of Chickens Given Sodium Sulfathiazole in Drinking Water. *Amer. Jour. Vet. Res.* Vol. VIII, No. 28, pp. 307-310. July, 1947.
- Smith, J. B. and Salomon, M., Optimum Soil-Nitrate Levels for Celery, Carrots, Spinach, Onions and Beets at Different Growth Stages. *Agr. Exp. Sta. Bul.* 300. 1947.
- Fifty-Ninth Annual Report of the Rhode Island Agricultural Experiment Station, 1947.

AGRICULTURAL EXTENSION SERVICE:

Hofford, H. M., "Rhode Island Takes the Road Ahead." Annual Report of the Agricultural Extension Service, May, 1947.

SCHOOL OF ENGINEERING:

Pease, E. M. J., and Wadsworth, George P., "Engineering Trigonometry," International Textbook Co., 1946.

SCHOOL OF HOME ECONOMICS

Crandall, Elizabeth Walbert (junior author with Dr. Irma H. Gross, Michigan State College) "Home Management In Theory And Practice," June, 1946, F. S. Croft and Co., Inc.

Tucker, Ruth E.; Hinman, Winifred F., and Halliday, Evelyn G., The Retention Of Thiamin And Riboflavin In Beef Cuts During Braising, Frying and Broiling; *Journal Of American Dietetics Association*, v. 22, p. 877, 1946.

Hinman, Winifred F., Tucker, Ruth E., Jans, Loretta M., and Halliday, Evelyn G., Excessively High Riboflavin Retention During Braising of Beef—"A Comparison of Methods of Assay"; *Industrial and Engineering Chemistry*, v. 18, p. 296-301, 1946.

SCHOOL OF SCIENCE:

Reynolds, Paul E., The Revival of the Sonnet Sequence; pamphlet, March 1947.

Reynolds, Paul E., Two Choices; *Newsletter*, CEA, April, 1947.

Thomas, Daniel H., The Dean Requested This; *Eleusis* (Chi Omega Quarterly), v. 49, p. 26 ff, February, 1947.

Maronpot, Raymond P., Reaching the Individual via the Unit Method; *Modern Language Journal*, v. 31, no. 3 (March, 1947), p. 157-161.

Thomas, Daniel H. (editor), History Section of "Good Reading," National Council of Teachers of English, 1947 ed.

OFFICE OF THE PRESIDENT:

Woodward, Carl R., "Faith, Antidote for Fear," address at the Seventy-Fourth Commencement Exercises of Boston University, May 26, 1947; *Bostonia*, v. 20, no. 9, June, 1947, p. 15-16.

Woodward, Carl R., History, Rural and Academic. Review of "Rural Hunterdon," by Hubert A. Schmidt; *Rutgers Alumni Monthly*, February, 1947.

Financial Report

I SUBMIT herewith the annual financial report of Rhode Island State College for the fiscal year ended June 30, 1947, consisting of the following:

Balance Sheet, June 30, 1947.....	Exhibit A
Summary of Revenue, Expenditures, Encumbrances and Unencumbered Balances.....	Exhibit B
Statement of Expenditures and Encumbrances.....	Schedule B-1
Auditor's Certificate	

Comments are as follows:

Current Income

During the fiscal year ended June 30, 1947, Rhode Island State College received \$2,726,050.45 for educational and general expenses.

The sources of this income are as follows:

*State Appropriation (General).....	\$675,000.00
Special State Appropriation.....	90,000.00
Federal Appropriations	234,001.79
Federal Experiment Station Earnings.....	49,747.51
Student Fees	776,240.97
Dining Units and Soda Fountain and Kingston Inn.....	361,540.11
Sales and Miscellaneous.....	115,466.20
Miscellaneous Reimbursements	135,517.05
Balance from Prior Year.....	288,536.82

Total	\$2,726,050.45
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*Includes \$100,000 appropriated in prior year for salaries paid for the year 1946-1947.

Current Expenditures

Expenditures for educational and general purposes for the fiscal year ended June 30, 1947, amounted to \$2,347,619.09 and are distributed as follows:

Personal Services	\$1,364,277.63
Maintenance and Operation.....	652,595.89
Capital Outlay	255,739.29
Encumbrances	75,006.28
Total	\$2,347,619.09

Operations

The college ended its fiscal year with a balance of unencumbered funds of \$378,431.36 summarized as follows:

Restricted federal funds:		
For military activities.....	\$1,175.49	
For student housing.....	36,863.80	
For agricultural experiment station.....	15,242.61	
For agricultural extension service.....	19,138.32	\$72,420.22
Restricted state funds:		
Water system	90,000.00	
Quonset Huts	4,832.95	
Prior year departmental balances.....	41,806.39	136,639.34
Expenses incurred in 1947 not encumbered until after July 1, 1947		24,361.80
Increase in Buildings and Grounds budget for maintenance of		
Kingston Inn		10,000.00
Amount allotted to the 1947-48 budget.....		135,000.00
Total		\$378,431.36

The foregoing amount of \$135,000.00 allotted to the next fiscal year budget was made possible by an advance of \$122,263.10 by the State of Rhode Island in anticipation of the collection of a like amount from the Veterans' Administration for tuitions, etc.

STANLEY S. GAIRLOCH, *Controller and Treasurer*

Exhibit A

BALANCE SHEET, JUNE 30, 1947

CURRENT FUNDS:		ASSETS		
		<i>Total</i>	<i>General</i>	<i>Restricted</i>
Cash on deposit:				
State treasurer	\$	450,400.64	\$ 288,417.90	\$ 161,982.74
College treasurer		3,037.00		3,037.00
Total		453,437.64	288,417.90	165,019.74
Imprest cash fund.....		3,000.00	3,000.00	
Accounts receivable		20,381.15	15,432.65	4,948.50
Accounts receivable—net Veterans' Admin- istration		23,187.51	73,187.51	
Auxiliary enterprises:				
Bookstore:				
Cash		6,521.53	6,521.53	
Accounts receivable		5,044.22	5,044.22	
Inventory		37,650.14	37,650.14	
Dining units inventory.....		19,100.54	19,100.54	
Total		68,316.43	68,316.43	
Other current restricted funds:				
Cash		14,274.91		14,274.91
Investments		2,392.50		2,392.50
Total		16,667.41		16,667.41
Total current funds.....		584,990.14	398,354.49	186,635.65
SCHOLARSHIP AND LOAN FUNDS:				
Cash		6,575.09		6,575.09
Notes receivable		1,883.96		1,883.96
Investments		218.50		218.50
Total		8,677.55		8,677.55
PLANT FUNDS: (No provision for depreciation)				
Land		183,048.43	183,048.43	
Buildings		3,718,116.27	3,718,116.27	
Improvements		59,653.14	59,653.14	
Equipment		777,879.18	777,879.18	
Residences and dining halls.....		620,878.05	620,878.05	
Temporary housing facilities.....		267,276.39	267,276.39	
Total		5,626,851.46	5,626,851.46	
AGENCY FUNDS:				
Cash		89,812.53		89,812.53
Investments		1,266.25		1,266.25
Total		91,078.78		91,078.78
TRUST FUND:				
Cash		60,011.89		60,011.89
Uncollected pledges		7,173.75		7,173.75
Investments		777.00		777.00
Total		67,962.64		67,962.64
TOTAL ALL FUNDS.....	\$	\$6,379,560.57	\$6,025,205.95	\$ 354,354.62

NOTE: At June 30, 1947, the Board of Trustees of State Colleges was contingently liable for \$74,150.00 as guarantor of notes of ten college fraternities.

Exhibit A

LIABILITIES

CURRENT FUNDS:

	<i>Total</i>	<i>General</i>	<i>Restricted</i>
Accounts payable — reserve for encumbrances	\$ 75,006.28	\$ 68,935.64	\$ 6,070.64
Accounts payable—auxiliary enterprises....	16,822.81	16,822.81	
Total	91,829.09	85,758.45	6,070.64

RESERVES:

Petty cash funds and unrealized income from accounts receivable.....	46,568.66	41,620.16	4,948.50
Auxiliary enterprises	51,493.62	51,493.62	
Other current restricted funds.....	16,667.41		16,667.41
Total	114,729.69	93,113.78	21,615.91

Unencumbered balances available for 1947-48 expenditure (Exhibit B):

General	306,021.14	211,188.19	94,832.95
Federal housing and military programs	38,039.29		38,039.29
Federal experiment and agricultural extension service programs.....	34,370.93	8,294.07	26,076.86
Total	378,431.36	219,482.26	158,949.10

Total current funds.....	584,990.14	398,354.49	186,635.65
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SCHOLARSHIP AND LOAN FUNDS:

Scholarship funds	1,824.90		1,824.90
Loan funds	6,852.65		6,852.65
Total	8,677.55		8,677.55

PLANT FUNDS:

Serial note (3%) due August 14, 1947....	10,000.00	10,000.00	
Net investment in plant facilities.....	5,616,851.46	5,616,851.46	
Total	5,626,851.46	5,626,851.46	

AGENCY FUNDS:

Research and fellowship funds.....	31,288.53		31,288.53
Student organizations	17,646.04		17,646.04
Student activities	19,839.05		19,839.05
Fraternity accounts	22,305.16		22,305.16
Total	91,078.78		91,078.78

TRUST FUND:

Reserve for uncollected pledges.....	7,173.75		7,173.75
Memorial building fund.....	60,788.89		60,788.89
Total	67,962.64		67,962.64

TOTAL ALL FUNDS.....	\$6,379,560.57	\$6,025,205.95	\$ 354,354.62
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Exhibit B

**SUMMARY OF
REVENUE, EXPENDITURES, ENCUMBRANCES AND
UNENCUMBERED BALANCES FOR THE YEAR ENDED
JUNE 30, 1947**

REVENUE:

State appropriation for general uses.....	\$ 575,000.00	
Less—Unexpended balance lapsed to State Treasurer.....	8.79	\$ 574,991.21
		<hr/>
Special State appropriation for water supply system.....		90,000.00
College earnings:		
Income from students.....	776,240.97	
Departmental sales and services.....	115,466.20	
College and Kingston Inn dining units and soda fountain	361,540.11	1,253,247.28
		<hr/>
Federal programs:		
Grants	234,001.79	
Experiment Station earnings.....	49,747.51	
Military activity fees.....	294.20	
Housing rentals	75,017.54	359,061.04
		<hr/>
Reimbursements:		
Book store salaries and advances.....	11,361.63	
Veteran's Administration—Books	48,843.68	60,205.31
		<hr/>
Total revenue		2,337,504.84

ADD:

Prior year unexpended balances reappropriated for 1946- 1947 expenditure	335,137.90	
Prior year encumbrances lapsed and reencumbered for 1946- 1947 expenditure	53,407.71	388,545.61
		<hr/>
Total available funds.....		2,726,050.45

DEDUCT:

Expenditures and encumbrances (Schedule B-1).....	2,347,619.09
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UNEXPENDED BALANCES AVAILABLE FOR 1947-1948

EXPENDITURE, PER EXHIBIT A.....	\$ 378,431.36
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Exhibit B-1**STATEMENT OF EXPENDITURES AND ENCUMBRANCES**

	<i>Expenditures and Encumbrances</i>
ADMINISTRATION	
President's Office	\$ 16,402.45
Vice President's Office.....	17,966.87
Dean of Women.....	18,430.08
Dean of Administration and Registrar's Office.....	25,184.06
Purchasing Department	9,033.14
Controller's Office	35,590.22
Office of Admissions.....	8,779.68
Public Relations	9,850.55
Board of Trustees.....	457.71
Alumni and Placement Office.....	14,577.04
General Administration	11,763.61
Total	<u>\$ 168,035.41</u>
SCHOOL OF AGRICULTURE	
Dean of Agriculture.....	\$ 7,933.30
Agricultural Economics	2,316.51
Animal Industry	56,723.45
Agricultural Chemistry	1,162.65
Sociology	6,597.36
Agronomy	3,844.49
Horticulture	34,512.23
Poultry Husbandry	4,556.00
Feeds and Fertilizer.....	6,538.55
Herd Testing	2,185.92
Agricultural Engineering	3,409.19
Forestry	1,329.02
Total	<u>\$ 131,108.67</u>
SCHOOL OF HOME ECONOMICS	
Home Economics	\$ 52,994.62
Nursing	1,551.91
Total	<u>\$ 54,546.53</u>
SCHOOL OF ENGINEERING	
Engineering Office	\$ 4,470.22
Mechanical Engineering	41,400.68
Electrical Engineering	13,333.63
Civil Engineering	14,691.96
Chemical Engineering	15,728.32
Mathematics	21,724.67
Physics	31,604.83
Engineering Experiment Station.....	10,883.77
Total	<u>\$ 153,838.08</u>

SCHOOL OF BUSINESS ADMINISTRATION AND GENERAL COLLEGE EXTENSION		Expenditures and Encumbrances
Business Administration	\$	53,997.12
General College Extension.....		73,970.32
Total	\$	127,967.44

SCHOOL OF SCIENCE

Bacteriology	\$	9,221.97
Botany		15,543.37
Chemistry		42,869.23
Education and Psychology.....		13,171.51
English		40,253.68
History and Political Science.....		16,149.52
Modern Languages		12,415.70
Zoology		16,996.33
Music		10,880.16
Military—R.O.T.C.		1,095.30
Physical Education for Men.....		39,570.72
Physical Education for Women.....		8,645.07
Marine Biology		2,678.98
Research (Science)		3,391.79
Total	\$	232,883.33

MISCELLANEOUS

Egg Laying Contest.....	\$	5,473.22
Library		38,020.68
Buildings and Grounds.....		335,838.34
Student Health		7,584.59
Bookstore		10,291.67
Kingston Inn—rooms		5,484.55
Purchase of Land.....		10,000.00
Summer School		38,654.04
Veterans' Program		55,907.64
Farm Labor Program.....		7,089.14
State College Centers.....		57,719.99
Prior Year Encumbrances.....		27,309.73
Dining Units		355,294.41
Soda Fountain		21,062.21
Kingston Inn Dining Room.....		24,194.44
Total	\$	999,924.65

RESTRICTED STATE APPROPRIATIONS

Erection of Quonset huts.....	\$	195,167.05
Construction of Farm Building.....		1,468.61
Total	\$	196,635.66

FEDERAL HOUSING AND MILITARY PROGRAMS

Military Activity	\$	455.98
R. E. Smith Dormitory.....		12,974.91
Fort Kearney Housing Units.....		6,334.07
Quonset Huts		18,844.76
Total	\$	38,609.72

	<i>Expenditures and Encumbrances</i>
FEDERAL EXPERIMENT STATION	
Hatch Fund	\$ 14,992.92
Adams Fund	15,014.06
Purnell Fund	61,046.03
Bankhead-Jones Fund	2,653.11
Experiment Station Earnings.....	42,414.17
State Offset Fund.....	24,956.35
Total	\$ 161,076.64
AGRICULTURAL EXTENSION SERVICE	
Smith-Lever and Bankhead-Jones Funds.....	\$ 37,040.51
Capper-Ketcham Fund	20,171.98
Bankhead-Flanagan Fund	2,267.46
Agricultural War Activities Fund.....	6,539.61
State Offset Fund.....	16,973.40
Total	\$ 82,992.96
TOTAL EXPENDITURES AND ENCUMBRANCES.....	\$ 2,347,619.09

ACCOUNTANTS' CERTIFICATE

O'BRIEN AND BURKE

Certified Public Accountants

New Industrial Trust Building, Providence

Board of Trustees of State Colleges,
State of Rhode Island and Providence Plantations:

We have examined the balance sheet of Rhode Island State College as of June 30, 1947 (Exhibit A) and the summary of revenue, expenditures, encumbrances and unencumbered balances (Exhibit B and supporting schedule B-1) for the fiscal year then ended, have reviewed the system of internal control and the accounting procedures of the College and, without making a detailed audit of the transactions, have examined or tested accounting records of the College and other supporting evidence, by methods and to the extent we deemed appropriate.

In our opinion, based upon such examination, the accompanying balance sheet, supporting schedule, and related summary of revenue, expenditures, encumbrances and unencumbered balances fairly present the position of Rhode Island State College at June 30, 1947, and the results of its operations for the fiscal year then ended.

/sgd/ O'BRIEN AND BURKE,

Certified Public Accountants

Providence
September 17, 1947